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One page.

☐ 1: [James PW, Saha N, Barton WA, Koley MV, Wimmer-Kleikamp SH, Nievergall E, Blobel CP, Himanen JP, Lackmann M, Nikolov DB.](#) [Related Articles, Links](#)

☐ Adam meets Eph: an ADAM substrate recognition module acts as a molecular switch for ephrin cleavage in trans.  
Cell. 2005 Oct 21;123(2):291-304.  
PMID: 16239146 [PubMed - indexed for MEDLINE]

☐ 2: [Mancia E, Shapiro L.](#) [Related Articles, Links](#)

☐ ADAM and Eph: how Ephrin-signaling cells become detached.  
Cell. 2005 Oct 21;123(2):185-7.  
PMID: 16239135 [PubMed - indexed for MEDLINE]

☐ 3: [Kaban K, Herbst RS.](#) [Related Articles, Links](#)

☐ Angiogenesis as a target for cancer therapy.  
Hematol Oncol Clin North Am. 2002 Oct;16(5):1125-71. Review.  
PMID: 12512387 [PubMed - indexed for MEDLINE]

☐ 4: [Nowakowski J, Cronin CN, McRee DE, Knuth MW, Nelson CG, Pavletich NP, Rogers J, Sang BC, Scheibe DN, Swanson RV, Thompson DA.](#) [Related Articles, Links](#)

☐ Structures of the cancer-related Aurora-A, FAK, and EphA2 protein kinases from nanovolume crystallography.  
Structure. 2002 Dec;10(12):1659-67.  
PMID: 12467573 [PubMed - indexed for MEDLINE]

☐ 5: [Baldisseri DM, Margolis JW, Weber DJ, Koo JH, Margolis FL.](#) [Related Articles, Links](#)

☐ Olfactory marker protein (OMP) exhibits a beta-clam fold in solution: implications for target peptide interaction and olfactory signal transduction.  
J Mol Biol. 2002 Jun 7;319(3):823-37.  
PMID: 12054873 [PubMed - indexed for MEDLINE]

☐ 6: [Smith PC, Firestein S, Hunt JE.](#) [Related Articles, Links](#)

☐ The crystal structure of the olfactory marker protein at 2.3 Å resolution.  
J Mol Biol. 2002 Jun 7;319(3):807-21.  
PMID: 12054872 [PubMed - indexed for MEDLINE]

☐ 7: [Himanen JP, Rajashankar KR, Lackmann M, Cowan CA, Henkemeyer M, Nikolov DB.](#) [Related Articles, Links](#)

☐ Crystal structure of an Eph receptor-ephrin complex.  
Nature. 2001 Dec 20;414(6866):933-8.  
PMID: 11780069 [PubMed - indexed for MEDLINE]

☐ 8: [Wybenga-Groot LE, Baskin B, Ong SH, Tong J, Pawson T, Sicheri F.](#) [Related Articles, Links](#)

☐ Structural basis for autoinhibition of the Ephb2 receptor tyrosine kinase by the unphosphorylated juxtamembrane region.  
Cell. 2001 Sep 21;106(6):745-57.  
PMID: 11572780 [PubMed - indexed for MEDLINE]

☐ 9: [Thanos CD, Goodwill KE, Bowie JU.](#) [Related Articles, Links](#)

☐ Oligomeric structure of the human EphB2 receptor SAM domain.  
Science. 1999 Feb 5;283(5403):833-6.  
PMID: 9933164 [PubMed - indexed for MEDLINE]

☐ 10: [Himanen JP, Henkemeyer M, Nikolov DB.](#) [Related Articles, Links](#)

☐ Crystal structure of the ligand-binding domain of the receptor tyrosine kinase EphB2.  
Nature. 1998 Dec 3;396(6710):486-91.  
PMID: 9853759 [PubMed - indexed for MEDLINE]

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10/601324

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SET PLURALS ON PERM

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L1 278 S ((EPHA2 RECEPTOR) OR (EPHA2 PROTEIN) OR  
(EPHA2 RECEPTOR TYROS

L2 3252 S ((EPHRIN? RECEPTOR?) OR (EPH? RECEPTOR?)  
OR (EPH? PROTEIN?) O

L3 12679414 S (ATOMIC OR CRYSTAL? OR STRUCTUR? OR 3D OR  
?DIMENSIONAL? OR ?R

L4 58 S L1 AND L3

L5 1115 S L2 AND L3

L6 49 DUP REM L4 (9 DUPLICATES REMOVED)

L7 814 DUP REM L5 (301 DUPLICATES REMOVED)

From: Dali Server 10/601,324

FSSP FAMILIES OF STRUCTURALLY SIMILAR PROTEINS, VERSION 1.0 (Apr 1 1995)  
CREATED Tue Mar 21 16:48:01 GMT 2006 for dali on s030-014.ebi.ac.uk  
METHOD Dali ver. 2.0: Holm, L., Sander, C. (1993) J.Mol.Biol. 233,123-138  
DATABASE 7062 protein chains  
PDBID 6252-A  
HEADER  
COMPND  
SOURCE  
AUTHOR  
SEQLength 263  
NALIGN 77  
WARNING pairs with Z<2.0 are structurally dissimilar

## SUMMARY: PDB/chain identifiers and structural alignment statistics

NR.	STRID1	STRID2	Z	RMSD	LALI	LSEQ2	%IDE	REVERS	PERMUT	NFRAG	TOPO	PROTEIN
1:	6252-A	1m14-A	30.8	1.7	244	307	36	0	0	8	S	
TRANSFERASE epidermal growth factor receptor fragment												
2:	6252-A	1fmk	27.7	3.5	246	438	44	0	0	6	S	
PHOSPHOTRANSFERASE tyrosine-protein kinase src fragmen												
3:	6252-A	1b6c-B	25.0	2.7	240	326	26	0	0	15	S	COMPLEX
(ISOMERASE/PROTEIN KINASE) fk506-binding prote												
4:	6252-A	1t53-A	22.1	2.9	223	291	27	0	0	24	S	
5:	6252-A	1hcl	21.6	3.3	234	294	21	0	0	14	S	PROTEIN
KINASE human cyclin-dependent kinase 2 (cdk2)												
6:	6252-A	1ia8-A	21.4	2.5	222	272	22	0	0	14	S	
TRANSFERASE chk1 checkpoint kinase fragment (homo sa												
7:	6252-A	1omw-A	21.1	2.8	237	614	21	0	0	15	S	
TRANSFERASE g-protein coupled receptor kinase 2 (grk2,												
8:	6252-A	1cdk-A	20.3	3.3	240	343	23	0	0	12	S	COMPLEX
(TRANSFERASE/INHIBITOR) camp-dependent protein												
9:	6252-A	1wbp-A	20.2	2.8	232	350	15	0	0	18	S	
TRANSFERASE serineTHREONINE-PROTEIN KINASE SPRK1 (srpk												
10:	6252-A	2bdw-A	19.7	3.0	224	309	19	0	0	17	S	
TRANSFERASE hypothetical protein kille8.1d fragment Mut												
11:	6252-A	1csn	19.7	3.5	233	293	17	0	0	18	S	
PHOSPHOTRANSFERASE casein kinase-1 (schizosaccharomyc												
12:	6252-A	1jwh-A	18.3	2.7	225	336	15	0	0	20	S	
TRANSFERASE casein kinase ii, alpha chain (ck ii, cat												
13:	6252-A	1zar-A	10.0	3.7	165	267	12	0	0	14	S	
TRANSFERASE rio2 kinase (archaeoglobus fulgidus) arch												
14:	6252-A	1zao-A	9.8	3.6	164	271	12	0	0	15	S	
TRANSFERASE rio2 serine kinase (archaeoglobus fulgidu												
15:	6252-A	1tqi-A	9.8	3.7	165	269	12	0	0	14	S	RIBOSOME
conserved hypothetical protein (rio2) (archa												
16:	6252-A	1ztf-A	9.5	3.4	161	243	16	0	0	19	S	
TRANSFERASE rio1 serine protein kinase (archaeoglobus												
17:	6252-A	1j7i-A	6.6	4.9	159	260	10	0	0	23	S	
TRANSFERASE aminoglycoside 3'-phosphotransferase (aph												
18:	6252-A	1cja-A	5.2	3.8	143	327	10	0	0	17	S	
TRANSFERASE actin-fragmin kinase fragment (physarum p												
19:	6252-A	1w2c-A	4.4	4.3	131	265	9	0	0	18	S	
TRANSFERASE inositol-trisphosphate 3-kinase a (inosito												

20:	6252-A	1bol-A	4.3	4.3	136	326	10	0	0	18	S	
TRANSFERASE phosphatidylinositol phosphate kinase iibe												
21:	6252-A	2a98-A	4.0	3.7	126	259	9	0	0	15	S	
TRANSFERASE inositol 1,4,5-trisphosphate 3-kinase c fr												
22:	6252-A	lia9-A	3.9	4.8	139	276	12	0	0	17	S	
TRANSFERASE transient receptor potential-related prot												
23:	6252-A	lryt	3.3	4.2	78	190	5	0	0	7	S	ELECTRON
TRANSPORT rubrerythrin biological_unit (desu												
24:	6252-A	lkny-A	3.3	9.1	111	253	9	0	0	15	S	
TRANSFERASE kanamycin nucleotidyltransferase (kntase)												
25:	6252-A	2a0b	3.1	4.3	80	118	10	0	0	7	S	SENSORY
TRANSDUCTION hpt domain (escherichia coli) ex												
26:	6252-A	lug7-A	3.1	4.5	83	128	5	0	0	9	S	
STRUCTURAL GENOMICS, UNKNOWN FUNCTION 2610208ml7rik pr												
27:	6252-A	lqgh-A	3.1	4.3	83	150	4	0	0	7	S	METAL
TRANSPORT non-heme iron-containing ferritin (li												
28:	6252-A	lzzp-A	3.0	3.5	77	109	9	0	0	7	S	
TRANSFERASE proto-oncogene tyrosine-protein kinase abl												
29:	6252-A	lzuaj-A	3.0	4.5	82	168	6	0	0	7	S	DNA
BINDING PROTEIN hypothetical protein llacc01001955												
30:	6252-A	lnlx-A	2.9	3.5	81	104	6	0	0	6	S	ALLERGEN
pollen allergen phl p 6 (phl p vi) (phleum p												
31:	6252-A	le8x-A	2.9	4.0	118	841	10	0	0	17	S	
PHOSPHOINOSITIDE 3-KINASE GAMMA phosphatidylinositol												
32:	6252-A	lsr2-A	2.8	3.9	75	116	9	0	0	8	S	
TRANSFERASE putative sensor-like histidine kinase yojn												
33:	6252-A	leum-A	2.8	4.2	79	161	4	0	0	7	S	METAL
BINDING PROTEIN ferritin 1 (escherichia coli)												
34:	6252-A	lbcf-A	2.8	3.8	75	157	5	0	0	5	S	IRON
STORAGE AND ELECTRON TRANSPORT Bacterioferritin (												
35:	6252-A	2fha	2.7	4.1	80	172	5	0	0	8	S	IRON
STORAGE ferritin Mutant biological_unit (homo sa												
36:	6252-A	lwn0-A	2.7	4.5	77	131	10	0	0	7	S	SIGNALING
PROTEIN histidine-containing phosphotransfer												
37:	6252-A	lozc-A	2.6	4.7	100	268	8	0	0	11	S	
38:	6252-A	lorj-A	2.6	4.8	79	126	9	0	0	5	S	CHAPERONE
flagellar protein flis (aquifex aeolicus vf												
39:	6252-A	lnsg-B	2.6	3.2	71	94	7	0	0	7	S	COMPLEX
(ISOMERASE/KINASE) fk506-binding protein (fkbp												
40:	6252-A	li5n-A	2.6	4.2	80	128	4	0	0	7	S	
TRANSFERASE chemotaxis protein chea fragment (salmon												
41:	6252-A	lhy5-A	2.6	3.6	77	120	4	0	0	7	S	TOXIN
yersinia pestis virulence protein yope fragment												
42:	6252-A	lggq-A	2.6	4.3	83	162	6	0	0	8	S	MEMBRANE
PROTEIN outer surface protein c fragment (os												
43:	6252-A	ldps-A	2.6	4.9	81	159	4	0	0	7	S	DNA-
BINDING PROTEIN dps (pexb) Mutant biological_unit												
44:	6252-A	ldd5-A	2.6	3.8	67	184	6	0	0	5	S	RIBOSOME
ribosome recycling factor (thermotoga mariti												
45:	6252-A	2fu2-A	2.5	2.8	55	77	15	0	0	4	S	
STRUCTURAL GENOMICS, UNKNOWN FUNCTION hypothetical pro												
46:	6252-A	2b0h-A	2.5	4.6	83	137	7	0	0	7	S	
STRUCTURAL PROTEIN talin-1 fragment (mus musculus) mo												
47:	6252-A	lz23-A	2.5	4.5	86	163	5	0	0	7	S	CELL
ADHESION crk-associated substrate fragment (p130c												
48:	6252-A	lx8z-A	2.5	4.4	70	151	3	0	0	5	S	PROTEIN
BINDING invertasePECTIN METHYLESTERASE INHIBIT												

49:	6252-A	1rjl-A	2.5	4.1	70	148	6	0	0	6 S	PROTEIN
BINDING invertase inhibitor (nicotiana tabacu											
50:	6252-A	lqsp-A	2.5	3.6	78	165	5	0	0	7 S	SIGNALING
PROTEIN ypd1 biological_unit (saccharomyces											
51:	6252-A	lax8	2.5	4.9	77	130	8	0	0	7 S	CYTOKINE
obesity protein (leptin) Mutant biological_un											
52:	6252-A	lvjx-A	2.4	4.1	78	145	9	0	0	9 S	
STRUCTURAL GENOMICS, UNKNOWN FUNCTION putative ferriti											
53:	6252-A	1r72-A	2.4	2.8	57	205	4	0	0	6 S	
54:	6252-A	1j7r-A	2.4	3.7	70	77	7	0	0	6 S	METAL
BINDING PROTEIN calcium vector protein fragment											
55:	6252-A	2cdw-A	2.3	4.6	100	408	4	0	0	11 S	
56:	6252-A	2bl7-A	2.3	2.8	57	77	2	0	0	5 S	BACTERIAL
PROTEIN enterocine a immunity protein Mutant											
57:	6252-A	256b-A	2.3	3.4	69	106	7	0	0	6 S	ELECTRON
TRANSPORT Cytochrome b562 (oxidized) (escher											
58:	6252-A	lylm-A	2.3	4.6	85	139	6	0	0	8 S	
STRUCTURAL GENOMICS, UNKNOWN FUNCTION hypothetical pro											
59:	6252-A	loxj-A	2.3	3.3	72	170	8	0	0	7 S	RNA
BINDING PROTEIN RNA-binding protein smaug fragment											
60:	6252-A	locr-C	2.3	3.9	82	261	5	0	0	7 S	
OXIDOREDUCTASE cytochrome c oxidase (ferrocytochrome c											
61:	6252-A	lm62-A	2.3	4.6	62	87	3	0	0	6 S	CHAPERONE
bag-family molecular chaperone regulator-4 f											
62:	6252-A	lcpq	2.3	3.2	66	129	6	0	0	7 S	ELECTRON
TRANSPORT cytochrome c' (rhodobacter capsula											
63:	6252-A	1c17-M	2.3	4.7	81	142	9	0	0	8 S	MEMBRANE
PROTEIN atp synthase subunit c atp synthase s											
64:	6252-A	1a48	2.3	3.1	41	298	7	0	0	6 S	ATP
BINDING PROTEIN phosphoribosylaminoimidazole-succi											
65:	6252-A	lyux-A	2.2	4.1	81	200	5	0	0	8 S	
OXIDOREDUCTASE nigerythrin Mutant (desulfovibrio vulg											
66:	6252-A	1w2w-A	2.2	4.2	89	207	7	0	0	8 S	ISOMERASE
5-methylthioribose-1-phosphate isomerase fra											
67:	6252-A	1w09-A	2.2	3.6	63	92	10	0	0	6 S	CHAPERONE
alpha-hemoglobin stabilizing protein (erythr											
68:	6252-A	1vr8-A	2.2	3.9	65	132	14	0	0	9 S	SIGNALING
PROTEIN gtp binding regulator fragment (the											
69:	6252-A	2ets-A	2.1	3.7	70	112	3	0	0	7 S	
STRUCTURAL GENOMICS, UNKNOWN FUNCTION hypothetical pro											
70:	6252-A	2d2s-A	2.1	4.5	78	217	9	0	0	7 S	
ENDOCYTOSIS/EXOCYTOSIS exocyst complex component exo84											
71:	6252-A	1jdc	2.1	3.3	41	418	5	0	0	6 S	HYDROLASE
1,4-alpha maltotetrahydrolase (maltotetraose											
72:	6252-A	1fft-C	2.1	4.4	80	185	5	0	0	8 S	
OXIDOREDUCTASE ubiquinol oxidase ubiquinol oxidase ub											
73:	6252-A	1f88-A	2.1	4.7	100	338	7	0	0	11 S	
SIGNALING PROTEIN rhodopsin bos taurus species T.Ok											
74:	6252-A	2mhr	2.0	8.0	69	118	3	0	0	5 S	OXYGEN
BINDING Myohemerythrin Sipunculan worm (themis											
75:	6252-A	1mqv-A	2.0	4.2	72	123	1	0	0	6 S	ELECTRON
TRANSPORT cytochrome c' Mutant (rhodopseudom											
76:	6252-A	1jr8-A	2.0	3.7	75	105	8	0	0	6 S	
OXIDOREDUCTASE erv2 protein, mitochondrial fragment (											
77:	6252-A	1c3w-A	2.0	4.0	92	222	3	0	0	11 S	ION
TRANSPORT bacteriorhodopsin (ground state wild typ											

SeqNo	PDBNo	AA	STRUCTURE	BP1	BP2	ACC	OCC	.	.	.	:	.	.	:	.	.	:	.	.	.		
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5	609	A H	>>	-	0	0	0	14	K	P	Ih	.	.	.	T	H	Fe	Fh	Ve	Rh		
Rh	Rh	Kh	Lh	.	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
6	610	A P	T 34	S+	0	0	0	18	Eg	Rg	Ah	Rg	M	.	Ms	Lg	Nt	Sh	Gt	Qg	Lh	
Lh	Lh	Lh	Kh	.	Lh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
7	611	A S	T 34	S+	0	0	0	21	Tg	Eg	Rh	Sg	Et	Eg	Nt	Dg	Gt	Dh	Vt	Dg	Vh	
Vh	Vh	Sh	Kh	.	Mh	Ae	Dg	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
8	612	A C	T <4	S+	0	0	0	21	Eg	Sg	Th	Ag	Nt	D	Dt	Qg	Rt	Nh	Ht	Dg	V	
V	V	Ys	Lh	.	Wh	Ke	Dg	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
9	613	A V	E	<	-B	28	0A	0	21	Fe	Le	I	Gb	Fe	We	Fe	Fe	Ye	Ye	Ye	Y	Ds
Ds	Ds	Ib	Ih	.	Gh	Ie	Ve	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
10	614	A T	E	-B	27	0A	0	21	Ke	Re	Ve	S	Qe	De	Se	Ee	He	De	Ke	Q	Ae	
Ae	Ae	T	Ys	.	A	Ee	Ke	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
11	615	A R	E	+B	26	0A	0	20	Ke	Le	Le	R	Ke	Le	Ve	Re	Ve	Ve	Ve	Lb	Ie	
Ie	Ie	A	R	.	P	Fe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
12	616	A Q	E	+	0	0	0	23	Ie	Ee	Qe	L	Ve	Ve	He	Ie	Ie	Ke	Ge	V	Ge	
Ge	Ge	G	C	Ie	.	Le	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
13	617	A K	E	-B	25	0A	0	23	Ke	Ve	Ee	T	Ee	Qe	Re	Ke	Re	Ee	Re	Rb	Ke	
Ke	Ke	G	Ve	Ee	.	Ne	Se	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
14	618	A V	E	+B	24	0A	0	23	Ve	Ke	Se	Le	Ke	Te	Ie	Te	Ke	Ee	Re	K	Le	
Le	Le	Ve	Ke	Re	.	K	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
15	619	A I	E	-	0	0	0	22	Le	Le	Ie	Se	Ie	Le	Ie	Le	Le	Le	Ie	L	Me	
Me	Me	Ie	D	S	.	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
16	620	A G	E	-B	23	0A	0	24	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge	G	Ge	
Ge	Ge	Se	T	E	.	D	M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
17	621	A A	E	-B	22	0A	0	21	S	Qe	Ke	Re	Ee	E	Re	Te	We	Ke	Ee	R	Ee	
Ee	Ee	T	.	Ks	.	.	Gb	.	.													

Ⓢ PDB ID or keyword Ⓢ Author  **SEARCH** Ⓢ Advanced Search

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Structure Summary Biology & Chemistry Materials & Methods Sequence Details Geometry

Queries

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1MQB

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Protein Workshop  
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**Title** Crystal Structure of Ephrin A2 (ephA2) Receptor Protein Kinase

**Authors** Nowakowski, J., Cronin, C.N., McRee, D.E., Knuth, M.W., Nelson, C., Pavletich, N., Rogers, J., Sang, B.C., Scheibe, D.N., Swanson, R.V., Thompson, D.A.

**Primary Citation** Nowakowski, J., Cronin, C.N., McRee, D.E., Knuth, M.W., Nelson, C., Pavletich, N., Rogers, J., Sang, B.C., Scheibe, D.N., Swanson, R.V., Thompson, D.A. Structures of the Cancer Related Aurora-A, FAK and EphA2 Protein Kinases from Nanovolume Crystallography *Structure* v10 pp.1659-1667, 2003  
[Abstract]

**History** Deposition 2002-09-16 Release 2003-09-16

**Experimental Method** Type X-RAY DIFFRACTION Data N/A

**Parameters**

Resolution [Å]	R-Value	R-Free	Space Group
2.30	0.236 (obs.)	0.288	P 3 <sub>2</sub> 2 1

**Unit Cell**

Length [Å]	Angles [°]
a 72.13 b 72.13 c 241.62	alpha 90.00 beta 90.00 gamma 120.00

**Molecular Description Asymmetric Unit** multimer (protein homodimer (333 residues))  
Polymer: 1 Molecule: Ephrin type-A receptor 2 Fragment: Kinase Domain  
Chains: A, B; EC No.: 2.7.1.112

**Functional Class** Transferase

**Source** Polymer: 1 Scientific Name: **Homo sapiens** Common Name: **Human** Expression system: **Homo sapiens**

**Related PDB Entries**

Id	Details
1MQ4	1MQ4 IS THE CRYSTAL STRUCTURE OF EPHRIN A2 (EPHA2) RECEPTOR PROTEIN
1MP8	1MP8 IS THE Crystal structure of Focal Adhesion Kinase (FAK)

**Chemical Component**

Identifier Name	Formula	Drug Similarity	Ligand Structure Interaction
ANP PHOSPHOAMINOPHOSPHONIC ACID-ADENYLATE ESTER	C <sub>10</sub> H <sub>17</sub> N <sub>6</sub> O <sub>12</sub> P <sub>3</sub>	[ View ]	[ View ] [ View ]

**SCOP Classification (version 1.69)**

Domain Info	Class	Fold	Superfamily	Family	Domain	Species
d1mqba_	Alpha and beta proteins (a+b)	Protein kinase-like (PK-like)	Protein kinase-like (PK-like)	Protein kinases, catalytic subunit	epha2 receptor tyrosine kinase	Human (Homo sapiens)
d1mqbb_	Alpha and beta proteins (a+b)	Protein kinase-like (PK-like)	Protein kinase-like (PK-like)	Protein kinases, catalytic subunit	epha2 receptor tyrosine kinase	Human (Homo sapiens)

**CATH Classification (version v2.6.0)**

Domain	Class	Architecture	Topology	Homology
1mqbA1	Alpha Beta	2-Layer Sandwich	Phosphorylase Kinase; domain 1	Phosphorylase Kinase; domain 1
1mqbA2	Mainly Alpha	Orthogonal Bundle	Transferase (Phosphotransferase); domain 1	Transferase (Phosphotransferase); domain 1
1mqbB1	Alpha Beta	2-Layer Sandwich	Phosphorylase Kinase; domain 1	Phosphorylase Kinase; domain 1
1mqbB2	Mainly Alpha	Orthogonal Bundle	Transferase (Phosphotransferase); domain 1	Transferase (Phosphotransferase); domain 1

**GO Terms**

Polymer	Molecular Function	Biological Process	Cellular Component
Ephrin type-A receptor	<ul style="list-style-type: none"> <li>protein kinase activity</li> <li>protein-tyrosine kinase activity</li> </ul>	<ul style="list-style-type: none"> <li>protein amino acid phosphorylation</li> <li>transmembrane</li> </ul>	<ul style="list-style-type: none"> <li>membrane</li> </ul>



2 (1MQB:A, B)

- ephrin receptor activity
- ATP binding

receptor protein tyrosine kinase signaling pathway

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# Sequence Search Results: 10/601324

1

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:35:54 ; Search time 207.279 Seconds  
(without alignments)  
2068.873 Million cell updates/sec

Title: US-10-601-324-1  
Perfect score: 5177  
Sequence: 1 MELQAARACFALLWGCALAA.....RIAYSLGLKQDVNTVGIP 976

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_21:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*  
9: geneseqp2005s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	5177	100.0	976	7 ADE40423	Ade40423 Human eph
2	5177	100.0	976	8 ADL61214	Adl61214 Human pro
3	5177	100.0	976	8 ADN03964	Adn03964 Antipsori
4	5177	100.0	976	9 ADU79818	Adu79818 Human Eph
5	5177	100.0	976	9 ADU79822	Adu79822 Human Eph
6	5177	100.0	976	9 ADV94805	Adv94805 Human ADP
7	5177	100.0	987	8 ADX97538	Adx97538 Pancreati
8	5147	99.4	976	7 ADJ95092	Adj95092 Novel NOV
9	5147	99.4	976	9 ADW96093	Adw96093 Human Eph
10	5147	99.4	976	9 ADZ66185	Adz66185 EphA2 pol
11	5147	99.4	976	9 AEB72892	Aeb72892 Human rec
12	5141	99.3	1035	9 ADZ66203	Adz66203 Protein e
13	5141	99.3	1035	9 AEB80023	Aeb80023 Human Eph
14	5141	99.3	1035	9 AEB72910	Aeb72910 Fusion pr

1

15	5048.5	97.5	963	8	ABM83447	Abm83447	Human dia
16	4748.5	91.7	977	9	AEA55026	Aea55026	Mouse tyr
17	4748.5	91.7	977	9	AEA55035	Aea55035	Mouse eph
18	2892	55.9	535	9	ADU79824	Adu79824	Extracell
19	2696.5	52.1	574	9	ADZ66213	Adz66213	Protein e
20	2696.5	52.1	574	9	AEB80034	Aeb80034	Human Eph
21	2696.5	52.1	574	9	AEB72921	Aeb72921	Fusion pr
22	2692	52.0	502	9	ADZ66206	Adz66206	Primary a
23	2692	52.0	502	9	AEB80026	Aeb80026	Human Eph
24	2692	52.0	502	9	AEB72913	Aeb72913	Human Eph
25	2692	52.0	563	9	ADZ66208	Adz66208	Protein e
26	2692	52.0	563	9	AEB80028	Aeb80028	Human Eph
27	2692	52.0	563	9	AEB72915	Aeb72915	Fusion pr
28	2692	52.0	581	9	ADZ66210	Adz66210	LLOss-PES
29	2692	52.0	581	9	AEB80030	Aeb80030	Human Eph
30	2692	52.0	581	9	AEB80032	Aeb80032	Human Eph
31	2692	52.0	581	9	AEB72917	Aeb72917	Fusion pr
32	2692	52.0	581	9	AEB72919	Aeb72919	Fusion pr
33	2650	51.2	991	2	AAR85090	Aar85090	EPH-like
34	2637	50.9	1037	6	ABR44241	Abr44241	Tyrosine
35	2632	50.8	1037	5	ABG61868	Abg61868	Prostate
36	2632	50.8	1037	7	ADE31683	Ade31683	Human 141
37	2629	50.8	1041	9	ADV97895	Adv97895	Murine pr
38	2622.5	50.7	953	5	ABP52826	Abp52826	Human rec
39	2604.5	50.3	975	5	ABP52827	Abp52827	Human EHK
40	2570	49.6	998	2	AAR85092	Aar85092	EPH-like
41	2566	49.6	998	2	AAW03421	Aaw03421	Mouse dev
42	2551	49.3	1005	2	AAW83147	Aaw83147	Rat recep
43	2519.5	48.7	986	2	AAR85091	Aar85091	EPH-like
44	2519.5	48.7	986	7	ADD46395	Add46395	Human Pro
45	2519.5	48.7	986	8	ADQ17780	Adq17780	Human sof

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:46:54 ; Search time 49.2101 Seconds  
 (without alignments)  
 1639.734 Million cell updates/sec

Title: US-10-601-324-1  
 Perfect score: 5177  
 Sequence: 1 MELQAARACFALLWGCALAA.....RIAYSLGLKQVNTVGIP 976

Scoring table: BLOSUM62  
 Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
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 2: /cgn2\_6/ptodata/1/iaa/6\_COMB.pep:\*  
 3: /cgn2\_6/ptodata/1/iaa/H\_COMB.pep:\*  
 4: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*  
 5: /cgn2\_6/ptodata/1/iaa/RE\_COMB.pep:\*  
 6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	5177	100.0	976	1	US-08-449-645A-18	Sequence 18, Appl
2	5177	100.0	976	1	US-08-702-367A-18	Sequence 18, Appl
3	5177	100.0	976	2	US-09-949-016-6499	Sequence 6499, Ap
4	5177	100.0	976	4	PCT-US95-04681-18	Sequence 18, Appl
5	5147	99.4	1013	2	US-09-949-016-7991	Sequence 7991, Ap
6	5120.5	98.9	977	1	US-08-673-789-8	Sequence 8, Appli
7	2650	51.2	991	1	US-08-449-645A-13	Sequence 13, Appl
8	2650	51.2	991	1	US-08-702-367A-13	Sequence 13, Appl
9	2650	51.2	991	4	PCT-US95-04681-13	Sequence 13, Appl
10	2634.5	50.9	967	1	US-08-449-645A-30	Sequence 30, Appl
11	2634.5	50.9	967	1	US-08-702-367A-30	Sequence 30, Appl
12	2622.5	50.7	953	2	US-09-751-389-7	Sequence 7, Appli
13	2604.5	50.3	975	2	US-09-751-389-8	Sequence 8, Appli
14	2570	49.6	998	1	US-08-449-645A-17	Sequence 17, Appl
15	2570	49.6	998	1	US-08-702-367A-17	Sequence 17, Appl
16	2570	49.6	998	2	US-09-949-016-6501	Sequence 6501, Ap
17	2570	49.6	998	4	PCT-US95-04681-17	Sequence 17, Appl
18	2570	49.6	1005	2	US-09-949-016-9901	Sequence 9901, Ap

19	2568	49.6	994	2	US-08-368-776A-12	Sequence 12, Appl
20	2566	49.6	998	2	US-08-368-776A-2	Sequence 2, Appli
21	2566	49.6	998	4	PCT-US96-00419-2	Sequence 2, Appli
22	2560.5	49.5	993	2	US-08-368-776A-11	Sequence 11, Appl
23	2551	49.3	1005	1	US-08-469-537A-103	Sequence 103, App
24	2537	49.0	982	1	US-08-673-789-4	Sequence 4, Appli
25	2532.5	48.9	986	1	US-08-673-789-3	Sequence 3, Appli
26	2520	48.7	983	1	US-08-449-645A-21	Sequence 21, Appl
27	2520	48.7	983	1	US-08-702-367A-21	Sequence 21, Appl
28	2520	48.7	983	4	PCT-US95-04681-21	Sequence 21, Appl
29	2519.5	48.7	986	1	US-08-449-645A-15	Sequence 15, Appl
30	2519.5	48.7	986	1	US-08-702-367A-15	Sequence 15, Appl
31	2519.5	48.7	986	4	PCT-US95-04681-15	Sequence 15, Appl
32	2519.5	48.7	997	2	US-09-949-016-7171	Sequence 7171, Ap
33	2518.5	48.6	983	1	US-08-162-809-16	Sequence 16, Appl
34	2518	48.6	983	2	US-09-771-161A-227	Sequence 227, App
35	2517	48.6	983	1	US-08-167-919A-10	Sequence 10, Appl
36	2517	48.6	983	2	US-08-715-106-10	Sequence 10, Appl
37	2517	48.6	983	2	US-09-442-649-10	Sequence 10, Appl
38	2514.5	48.6	968	2	US-09-751-389-6	Sequence 6, Appli
39	2512.5	48.5	1104	1	US-08-222-616-36	Sequence 36, Appl
40	2512.5	48.5	1104	2	US-08-446-648-36	Sequence 36, Appl
41	2512.5	48.5	1104	2	US-09-982-610-36	Sequence 36, Appl
42	2512.5	48.5	1104	4	PCT-US95-04228-36	Sequence 36, Appl
43	2463.5	47.6	1035	2	US-09-751-389-4	Sequence 4, Appli
44	2461	47.5	1036	2	US-09-751-389-2	Sequence 2, Appli
45	2387	46.1	995	1	US-08-162-809-18	Sequence 18, Appl

# Sequence Search Results: 10/601324

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:02:20 ; Search time 167.762 Seconds  
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2430.838 Million cell updates/sec

Title: US-10-601-324-1  
Perfect score: 5177  
Sequence: 1 MELQAARACFALLWGCALAA.....RIAYSLGLKQVNTVGIPI 976

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published\_Applications\_AA\_Main:\*  
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2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	5177	100.0	976	4	US-10-366-288-2	Sequence 2, Appli
2	5177	100.0	976	4	US-10-648-593-138	Sequence 138, App
3	5177	100.0	976	5	US-10-616-403-6	Sequence 6, Appli
4	5147	99.4	976	4	US-10-287-226-320	Sequence 320, App
5	5147	99.4	976	5	US-10-897-711-2	Sequence 2, Appli
6	2697	52.1	991	5	US-10-732-923-13667	Sequence 13667, A
7	2677	51.7	1013	5	US-10-732-923-13668	Sequence 13668, A
8	2650	51.2	991	3	US-09-823-187-44	Sequence 44, Appl
9	2632	50.8	1037	4	US-10-316-124-3	Sequence 3, Appli
10	2632	50.8	1037	4	US-10-353-690-40	Sequence 40, Appl
11	2632	50.8	1037	6	US-11-064-551-3	Sequence 3, Appli
12	2629	50.8	1041	5	US-10-840-512-215	Sequence 215, App
13	2622.5	50.7	953	4	US-10-412-277-7	Sequence 7, Appli
14	2604.5	50.3	975	4	US-10-412-277-8	Sequence 8, Appli
15	2576	49.8	985	4	US-10-029-020-61	Sequence 61, Appl
16	2574	49.7	998	3	US-09-823-187-43	Sequence 43, Appl
17	2570	49.6	998	3	US-09-823-187-40	Sequence 40, Appl
18	2566	49.6	998	3	US-09-823-187-42	Sequence 42, Appl

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19	2549	49.2	1005	4	US-10-029-020-63	Sequence 63, Appl
20	2542.5	49.1	993	3	US-09-823-187-39	Sequence 39, Appl
21	2542.5	49.1	993	3	US-09-823-187-41	Sequence 41, Appl
22	2522.5	48.7	983	5	US-10-732-923-13675	Sequence 13675, A
23	2519.5	48.7	986	5	US-10-723-860-597	Sequence 597, App
24	2519.5	48.7	986	5	US-10-756-149-4880	Sequence 4880, Ap
25	2519.5	48.7	997	5	US-10-450-763-36048	Sequence 36048, A
26	2519.5	48.7	1026	5	US-10-450-763-53290	Sequence 53290, A
27	2518	48.6	983	3	US-09-771-161A-227	Sequence 227, App
28	2518	48.6	983	4	US-10-205-823-97	Sequence 97, Appl
29	2518	48.6	983	4	US-10-345-680-2	Sequence 2, Appli
30	2518	48.6	983	4	US-10-295-027-602	Sequence 602, App
31	2518	48.6	983	4	US-10-029-020-59	Sequence 59, Appl
32	2518	48.6	983	6	US-11-051-454-97	Sequence 97, Appl
33	2515	48.6	983	5	US-10-794-514A-467	Sequence 467, App
34	2515	48.6	983	5	US-10-489-125B-11	Sequence 11, Appl
35	2514.5	48.6	968	4	US-10-412-277-6	Sequence 6, Appli
36	2512.5	48.5	1104	3	US-09-982-610-36	Sequence 36, Appl
37	2469.5	47.7	1130	5	US-10-840-512-216	Sequence 216, App
38	2467	47.7	1036	3	US-09-971-708-2	Sequence 2, Appli
39	2467	47.7	1036	4	US-10-245-752-104	Sequence 104, App
40	2467	47.7	1036	4	US-10-245-859-104	Sequence 104, App
41	2467	47.7	1036	4	US-10-245-103-104	Sequence 104, App
42	2467	47.7	1036	4	US-10-245-107-104	Sequence 104, App
43	2467	47.7	1036	4	US-10-245-143-104	Sequence 104, App
44	2467	47.7	1036	4	US-10-245-771-104	Sequence 104, App
45	2467	47.7	1036	4	US-10-245-851-104	Sequence 104, App

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:03:25 ; Search time 23.8594 Seconds  
 (without alignments)  
 1170.855 Million cell updates/sec

Title: US-10-601-324-1  
 Perfect score: 5177  
 Sequence: 1 MELQAARACFALLWGCALAA.....RIAYSLGLKQVNTVGIP 976

Scoring table: BLOSUM62  
 Gapop 10.0 , Gapext 0.5

Searched: 169630 seqs, 28622889 residues

Total number of hits satisfying chosen parameters: 169630

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : Published\_Applications\_AA\_New:\*  
 1: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*  
 2: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*  
 3: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep:\*  
 4: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*  
 5: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep:\*  
 6: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep:\*  
 7: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep:\*  
 8: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	5177	100.0	976	7	US-11-072-175-138	Sequence 138, Appli
2	5147	99.4	976	6	US-10-966-483-2	Sequence 2, Appli
3	5147	99.4	976	6	US-10-511-273-1	Sequence 1, Appli
4	5147	99.4	976	7	US-11-233-796-2	Sequence 2, Appli
5	5147	99.4	976	7	US-11-203-251A-77	Sequence 77, Appl
6	5141	99.3	1035	6	US-10-966-483-20	Sequence 20, Appl
7	5141	99.3	1035	7	US-11-021-441-4	Sequence 4, Appli
8	2696.5	52.1	574	6	US-10-966-483-31	Sequence 31, Appl
9	2696.5	52.1	574	7	US-11-021-441-15	Sequence 15, Appl
10	2692	52.0	502	6	US-10-966-483-23	Sequence 23, Appl
11	2692	52.0	502	7	US-11-021-441-7	Sequence 7, Appli
12	2692	52.0	563	6	US-10-966-483-25	Sequence 25, Appl
13	2692	52.0	563	7	US-11-021-441-9	Sequence 9, Appli
14	2692	52.0	581	6	US-10-966-483-27	Sequence 27, Appl
15	2692	52.0	581	6	US-10-966-483-29	Sequence 29, Appl
16	2692	52.0	581	7	US-11-021-441-11	Sequence 11, Appl



17	2692	52.0	581	7	US-11-021-441-13	Sequence 13, Appl
18	2651	51.2	1015	7	US-11-203-251A-82	Sequence 82, Appl
19	2633	50.9	1037	7	US-11-203-251A-81	Sequence 81, Appl
20	2576	49.8	985	7	US-11-113-424-61	Sequence 61, Appl
21	2570	49.6	998	7	US-11-203-251A-83	Sequence 83, Appl
22	2549	49.2	1005	7	US-11-113-424-63	Sequence 63, Appl
23	2519.5	48.7	986	7	US-11-203-251A-80	Sequence 80, Appl
24	2518	48.6	983	7	US-11-113-424-59	Sequence 59, Appl
25	2515	48.6	983	7	US-11-203-251A-78	Sequence 78, Appl
26	2466.5	47.6	1035	7	US-11-113-424-20	Sequence 20, Appl
27	2457	47.5	1052	7	US-11-113-424-22	Sequence 22, Appl
28	2392	46.2	976	7	US-11-203-251A-76	Sequence 76, Appl
29	2387	46.1	995	7	US-11-113-424-62	Sequence 62, Appl
30	2375.5	45.9	1005	7	US-11-203-251A-84	Sequence 84, Appl
31	2370	45.8	987	6	US-10-770-726-61	Sequence 61, Appl
32	2370	45.8	987	7	US-11-203-251A-87	Sequence 87, Appl
33	2364	45.7	456	6	US-10-966-483-34	Sequence 34, Appl
34	2364	45.7	456	7	US-11-021-441-18	Sequence 18, Appl
35	2357.5	45.5	1055	7	US-11-072-175-139	Sequence 139, App
36	2357.5	45.5	1055	7	US-11-203-251A-86	Sequence 86, Appl
37	2356.5	45.5	1055	7	US-11-169-041-155	Sequence 155, App
38	2356.5	45.5	1055	7	US-11-051-720-1417	Sequence 1417, Ap
39	2318	44.8	984	7	US-11-113-424-60	Sequence 60, Appl
40	2312	44.7	984	7	US-11-203-251A-85	Sequence 85, Appl
41	2281.5	44.1	998	7	US-11-203-251A-88	Sequence 88, Appl
42	2265.5	43.8	998	6	US-10-510-524-1	Sequence 1, Appli
43	2195	42.4	490	6	US-10-966-483-42	Sequence 42, Appl
44	2195	42.4	490	7	US-11-021-441-26	Sequence 26, Appl
45	2179	42.1	479	6	US-10-966-483-36	Sequence 36, Appl

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:41:59 ; Search time 41.0084 Seconds  
(without alignments)  
2289.959 Million cell updates/sec

Title: US-10-601-324-1  
Perfect score: 5177  
Sequence: 1 MELQAARACFALLWGICALAA.....RIAYSLGLKQDVNTVGIP 976

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR\_80:\*  
1: pirl:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB	ID	Description
1	5177	100.0	976	2	A36355	protein-tyrosine k
2	4748.5	91.7	977	2	S49004	tyrosine kinase Mp
3	4589.5	88.7	975	2	I48974	receptor-protein t
4	2677	51.7	1013	2	I50615	receptor-type prot
5	2650	51.2	991	2	I78843	receptor protein-t
6	2576	49.8	985	2	I51549	receptor tyrosine
7	2571	49.7	981	2	S51604	receptor-like tyro
8	2570	49.6	998	2	I58351	receptor protein-t
9	2566	49.6	998	2	JC5672	receptor tyrosine
10	2549	49.2	1005	2	S49015	receptor tyrosine
11	2524.5	48.8	986	2	S78059	protein-tyrosine k
12	2522.5	48.7	983	2	B45583	receptor tyrosine
13	2519.5	48.7	986	2	I78844	receptor protein-t
14	2518	48.6	983	2	A38224	protein-tyrosine k
15	2491	48.1	983	2	A45583	receptor tyrosine
16	2387	46.1	995	2	A56599	embryo kinase 5 -
17	2349.5	45.4	970	2	I78842	receptor protein-t
18	2336.5	45.1	948	2	S51605	receptor-like tyro
19	2322	44.9	984	1	A34076	protein-tyrosine k
20	2318	44.8	984	2	A39753	protein-tyrosine k

21	2295.5	44.3	988	2	I50611	protein-tyrosine k
22	2285	44.1	898	2	S47489	receptor tyrosine
23	2283	44.1	893	2	S51603	receptor-like tyro
24	2272	43.9	993	2	I48653	mouse developmenta
25	2265.5	43.8	998	2	S37627	protein-tyrosine k
26	2245	43.4	849	2	I50617	protein-tyrosine k
27	2212.5	42.7	985	2	I51672	receptor tyrosine
28	2193	42.4	877	2	I48967	brain-specific kin
29	2179.5	42.1	938	2	I49071	protein kinase - m
30	2148.5	41.5	952	2	I50612	protein-tyrosine k
31	2135	41.2	426	2	I48759	protein-tyrosine k
32	2133	41.2	987	2	A54092	protein-tyrosine k
33	2112	40.8	987	2	I48652	mouse developmenta
34	2091.5	40.4	987	2	I48953	eph-related recept
35	1796.5	34.7	1006	2	JC5526	kinase-defective E
36	1667.5	32.2	1019	2	T13039	tyrosine kinase re
37	1416	27.4	490	2	I50613	protein-tyrosine k
38	1390.5	26.9	612	2	S33506	protein-tyrosine k
39	1365	26.4	1122	2	T42400	Eph receptor tyros
40	1364.5	26.4	480	2	I48760	protein-tyrosine k
41	1342	25.9	478	2	A57174	protein-tyrosine k
42	1248.5	24.1	610	2	I48612	developmental kina
43	1248.5	24.1	626	2	I48614	developmental kina
44	1243	24.0	605	2	JC5673	receptor tyrosine
45	1241	24.0	919	2	T29581	hypothetical prote

# Sequence Search Results: 10/601324

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:37:09 ; Search time 217.717 Seconds  
(without alignments)  
3162.796 Million cell updates/sec

Title: US-10-601-324-1  
Perfect score: 5177  
Sequence: 1 MELQAARACFALLWGCALAA.....RIAYSLGLKQVNTVGIPI 976

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : UniProt\_05.80:\*  
1: uniprot\_sprot:\*  
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	5177	100.0	976	1 EPHA2_HUMAN	P29317 homo sapien
2	5147	99.4	976	2 Q8N3Z2_HUMAN	Q8n3z2 homo sapien
3	4748.5	91.7	977	1 EPHA2_MOUSE	Q03145 mus musculu
4	3765.5	72.7	974	2 Q6DII4_XENTR	Q6dii4 xenopus tro
5	3747.5	72.4	976	2 Q6NTV5_XENLA	Q6ntv5 xenopus lae
6	3738.5	72.2	963	2 Q5FWW9_XENLA	Q5fww9 xenopus lae
7	3673	70.9	977	2 Q9PWR5_XENLA	Q9pwr5 xenopus lae
8	2819.5	54.5	984	2 Q6NZS1_BRARE	Q6nzs1 brachydanio
9	2738.5	52.9	1042	2 Q4RXA0_TETNG	Q4rxao tetraodon n
10	2677	51.7	1013	1 EPHA5_CHICK	P54755 gallus gall
11	2632	50.8	1037	1 EPHA5_HUMAN	P54756 homo sapien
12	2592	50.1	969	2 Q7Z3F2_HUMAN	Q7z3f2 homo sapien
13	2583.5	49.9	986	2 Q7ZYM7_XENLA	Q7zym7 xenopus lae
14	2582.5	49.9	986	1 EPA4A_XENLA	Q91845 xenopus lae
15	2576	49.8	985	1 EPA4B_XENLA	Q91694 xenopus lae
16	2574	49.7	998	1 EPHA7_RAT	P54759 rattus norv
17	2573	49.7	994	2 Q8R381_MOUSE	Q8r381 mus musculu
18	2571	49.7	998	2 Q8BSU8_MOUSE	Q8bsu8 mus musculu
19	2569	49.6	998	1 EPHA7_HUMAN	Q15375 homo sapien
20	2566	49.6	998	1 EPHA7_MOUSE	Q61772 mus musculu
21	2565.5	49.6	1017	2 Q59FT4_HUMAN	Q59ft4 homo sapien
22	2554	49.3	969	2 Q98TD0_CHICK	Q98td0 gallus gall

23	2549	49.2	1005	1	EPHA5_RAT	P54757	rattus norv
24	2542.5	49.1	993	1	EPHA7_CHICK	O42422	gallus gall
25	2530.5	48.9	986	2	Q5ZEW1_BRARE	Q5zew1	brachydanio
26	2529.5	48.9	984	2	Q8BRB1_MOUSE	Q8brb1	mus musculu
27	2529.5	48.9	984	2	Q8C3U1_MOUSE	Q8c3u1	mus musculu
28	2529.5	48.9	986	2	Q80VZ2_MOUSE	Q80vz2	mus musculu
29	2524.5	48.8	986	1	EPHA4_CHICK	Q07496	gallus gall
30	2524.5	48.8	986	1	EPHA4_MOUSE	Q03137	mus musculu
31	2522.5	48.7	983	1	EPHA3_CHICK	P29318	gallus gall
32	2519.5	48.7	986	1	EPHA4_HUMAN	P54764	homo sapien
33	2518	48.6	983	1	EPHA3_HUMAN	P29320	homo sapien
34	2517.5	48.6	984	1	EPHA3_RAT	O08680	rattus norv
35	2511	48.5	983	2	Q6P4R6_HUMAN	Q6p4r6	homo sapien
36	2491	48.1	983	1	EPHA3_MOUSE	P29319	mus musculu
37	2470.5	47.7	949	2	Q58F15_HUMAN	Q58f15	homo sapien
38	2463.5	47.6	1035	1	EPHA6_MOUSE	Q62413	mus musculu
39	2452	47.4	927	2	Q99KA8_MOUSE	Q99ka8	mus musculu
40	2427.5	46.9	981	1	EPHA3_BRARE	O13146	brachydanio
41	2398	46.3	976	1	EPHA1_HUMAN	P21709	homo sapien
42	2396.5	46.3	977	1	EPHA1_MOUSE	Q60750	mus musculu
43	2390.5	46.2	977	2	Q6IR19_MOUSE	Q6ir19	mus musculu
44	2375.5	45.9	1005	1	EPHA8_HUMAN	P29322	homo sapien
45	2373	45.8	1004	1	EPHB2_CHICK	P28693	gallus gall

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:07:20 ; Search time 187 Seconds  
(without alignments)  
655.544 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPSCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 2443163 seqs, 439378781 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A\_Geneseq\_21:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*  
9: geneseqp2005s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB	ID	Description
1	279	100.0	456	9	ADZ66216	Adz66216 Primary a
2	279	100.0	456	9	AEB80037	Aeb80037 Human Eph
3	279	100.0	456	9	AEB72924	Aeb72924 Human Eph
4	279	100.0	479	9	ADZ66218	Adz66218 Protein e
5	279	100.0	479	9	AEB80039	Aeb80039 Human Eph
6	279	100.0	479	9	AEB72926	Aeb72926 Fusion pr
7	279	100.0	490	9	ADZ66223	Adz66223 Protein e
8	279	100.0	490	9	AEB80045	Aeb80045 Human Eph
9	279	100.0	490	9	AEB72932	Aeb72932 Fusion pr
10	279	100.0	497	9	ADZ66220	Adz66220 Protein e
11	279	100.0	497	9	AEB80043	Aeb80043 Human Eph
12	279	100.0	497	9	AEB80041	Aeb80041 Human Eph
13	279	100.0	497	9	AEB72928	Aeb72928 Fusion pr
14	279	100.0	497	9	AEB72930	Aeb72930 Fusion pr
15	279	100.0	963	8	ABM83447	Abm83447 Human dia

16	279	100.0	976	7	ADE40423	Ade40423	Human	eph
17	279	100.0	976	7	ADJ95092	Adj95092	Novel	NOV
18	279	100.0	976	8	ADL61214	Adl61214	Human	pro
19	279	100.0	976	8	ADN03964	Adn03964	Antipsori	
20	279	100.0	976	9	ADU79818	Adu79818	Human	Eph
21	279	100.0	976	9	ADU79822	Adu79822	Human	Eph
22	279	100.0	976	9	ADV94805	Adv94805	Human	ADP
23	279	100.0	976	9	ADW96093	Adw96093	Human	Eph
24	279	100.0	976	9	ADZ66185	Adz66185	EphA2	pol
25	279	100.0	976	9	AEB72892	Aeb72892	Human	rec
26	279	100.0	987	8	ADX97538	Adx97538	Pancreati	
27	279	100.0	1035	9	ADZ66203	Adz66203	Protein e	
28	279	100.0	1035	9	AEB80023	Aeb80023	Human	Eph
29	279	100.0	1035	9	AEB72910	Aeb72910	Fusion pr	
30	77	27.6	977	9	AEA55026	Aea55026	Mouse	tyr
31	77	27.6	977	9	AEA55035	Aea55035	Mouse	eph
32	55	19.7	55	6	ABU83030	Abu83030	Human	rec
33	36	12.9	308	7	ADA39525	Ada39525	Human	kin
34	36	12.9	308	8	ADS18041	Ads18041	Human	nov
35	36	12.9	334	7	ADF12512	Adf12512	Consensus	
36	36	12.9	534	8	ADX91454	Adx91454	Plant	ful
37	36	12.9	558	8	ADX91452	Adx91452	Plant	ful
38	36	12.9	942	7	ADA39523	Ada39523	Human	kin
39	36	12.9	942	8	ADS18039	Ads18039	Human	nov
40	36	12.9	948	2	AAW83148	Aaw83148	Rat	recep
41	36	12.9	948	5	ABP52824	Abp52824	Rat	recep
42	36	12.9	1035	5	ABG70391	Abg70391	Human	Eph
43	36	12.9	1035	5	ABP52823	Abp52823	Mouse	rec
44	36	12.9	1035	7	ADF12510	Adf12510	Murine	Ep
45	36	12.9	1036	4	AAG67398	Aag67398	Amino aci	

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:15:00 ; Search time 48 Seconds  
(without alignments)  
480.552 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 572060 seqs, 82675679 residues

Word size : 0

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5\_COMB.pep:\*  
2: /cgn2\_6/ptodata/1/iaa/6\_COMB.pep:\*  
3: /cgn2\_6/ptodata/1/iaa/H\_COMB.pep:\*  
4: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*  
5: /cgn2\_6/ptodata/1/iaa/RE\_COMB.pep:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	279	100.0	976	1 US-08-449-645A-18	Sequence 18, Appl
2	279	100.0	976	1 US-08-702-367A-18	Sequence 18, Appl
3	279	100.0	976	2 US-09-949-016-6499	Sequence 6499, Ap
4	279	100.0	976	4 PCT-US95-04681-18	Sequence 18, Appl
5	279	100.0	1013	2 US-09-949-016-7991	Sequence 7991, Ap
6	173	62.0	977	1 US-08-673-789-8	Sequence 8, Appli
7	55	19.7	55	1 US-08-456-647B-42	Sequence 42, Appl
8	55	19.7	55	1 US-08-237-401A-42	Sequence 42, Appl
9	54	19.4	54	1 US-08-469-537A-29	Sequence 29, Appl
10	38	13.6	687	1 US-08-449-645A-29	Sequence 29, Appl
11	38	13.6	687	1 US-08-702-367A-29	Sequence 29, Appl
12	36	12.9	308	2 US-10-004-542-4	Sequence 4, Appli
13	36	12.9	308	2 US-10-430-797-4	Sequence 4, Appli
14	36	12.9	942	2 US-10-004-542-2	Sequence 2, Appli
15	36	12.9	942	2 US-10-430-797-2	Sequence 2, Appli
16	36	12.9	948	1 US-08-469-537A-101	Sequence 101, App
17	36	12.9	948	2 US-09-751-389-5	Sequence 5, Appli
18	36	12.9	1035	2 US-09-751-389-4	Sequence 4, Appli



19	36	12.9	1036	2	US-09-751-389-2	Sequence 2, Appli
20	30	10.8	397	2	US-09-949-016-11445	Sequence 11445, A
21	30	10.8	612	1	US-08-673-789-11	Sequence 11, Appl
22	30	10.8	945	2	US-09-949-016-8172	Sequence 8172, Ap
23	30	10.8	951	1	US-08-162-809-2	Sequence 2, Appli
24	30	10.8	970	1	US-08-673-789-7	Sequence 7, Appli
25	30	10.8	970	1	US-08-449-645A-11	Sequence 11, Appl
26	30	10.8	970	1	US-08-702-367A-11	Sequence 11, Appl
27	30	10.8	970	4	PCT-US95-04681-11	Sequence 11, Appl
28	30	10.8	973	1	US-08-162-809-8	Sequence 8, Appli
29	30	10.8	973	1	US-08-162-809-10	Sequence 10, Appl
30	30	10.8	984	1	US-08-673-789-6	Sequence 6, Appli
31	30	10.8	984	2	US-09-949-016-6502	Sequence 6502, Ap
32	30	10.8	988	1	US-08-162-809-14	Sequence 14, Appl
33	30	10.8	993	1	US-08-348-143-1	Sequence 1, Appli
34	30	10.8	993	1	US-08-571-785-1	Sequence 1, Appli
35	30	10.8	993	2	US-09-192-435-1	Sequence 1, Appli
36	30	10.8	993	2	US-09-558-340-1	Sequence 1, Appli
37	30	10.8	994	2	US-08-542-635-2	Sequence 2, Appli
38	30	10.8	995	1	US-08-162-809-18	Sequence 18, Appl
39	30	10.8	995	1	US-08-673-789-5	Sequence 5, Appli
40	30	10.8	998	1	US-08-449-645A-20	Sequence 20, Appl
41	30	10.8	998	1	US-08-702-367A-20	Sequence 20, Appl
42	30	10.8	998	4	PCT-US95-04681-20	Sequence 20, Appl
43	30	10.8	1011	1	US-08-162-809-12	Sequence 12, Appl
44	29	10.4	993	2	US-08-368-776A-11	Sequence 11, Appl
45	29	10.4	994	2	US-08-368-776A-12	Sequence 12, Appl

# Sequence Search Results: 10/601324

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:16:40 ; Search time 163 Seconds  
(without alignments)  
715.180 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPSCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 1867569 seqs, 417829326 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Published\_Applications\_AA\_Main:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Query Match Length	DB	ID	Description
1	279	100.0	976	4	US-10-366-288-2
2	279	100.0	976	4	US-10-287-226-320
3	279	100.0	976	4	US-10-648-593-138
4	279	100.0	976	5	US-10-616-403-6
5	279	100.0	976	5	US-10-897-711-2
6	124	44.4	297	5	US-10-794-493-15
7	55	19.7	55	3	US-09-158-722-42
8	36	12.9	308	4	US-10-430-797-4
9	36	12.9	308	4	US-10-843-129-4
10	36	12.9	334	3	US-09-971-708-5
11	36	12.9	337	5	US-10-794-493-16
12	36	12.9	534	4	US-10-425-114-54118
13	36	12.9	558	4	US-10-425-114-54116
14	36	12.9	942	4	US-10-430-797-2
15	36	12.9	942	4	US-10-843-129-2
16	36	12.9	948	4	US-10-412-277-5
17	36	12.9	976	5	US-10-732-923-13613
18	36	12.9	1035	3	US-09-971-708-3

17

19	36	12.9	1035	4	US-10-412-277-4	Sequence 4, Appli
20	36	12.9	1035	4	US-10-029-020-20	Sequence 20, Appl
21	36	12.9	1036	3	US-09-971-708-2	Sequence 2, Appli
22	36	12.9	1036	4	US-10-245-752-104	Sequence 104, App
23	36	12.9	1036	4	US-10-245-859-104	Sequence 104, App
24	36	12.9	1036	4	US-10-245-103-104	Sequence 104, App
25	36	12.9	1036	4	US-10-245-107-104	Sequence 104, App
26	36	12.9	1036	4	US-10-245-143-104	Sequence 104, App
27	36	12.9	1036	4	US-10-245-771-104	Sequence 104, App
28	36	12.9	1036	4	US-10-245-851-104	Sequence 104, App
29	36	12.9	1036	4	US-10-245-883-104	Sequence 104, App
30	36	12.9	1036	4	US-10-237-535-104	Sequence 104, App
31	36	12.9	1036	4	US-10-238-183-104	Sequence 104, App
32	36	12.9	1036	4	US-10-238-283-104	Sequence 104, App
33	36	12.9	1036	4	US-10-238-370-104	Sequence 104, App
34	36	12.9	1036	4	US-10-245-055-104	Sequence 104, App
35	36	12.9	1036	4	US-10-245-147-104	Sequence 104, App
36	36	12.9	1036	4	US-10-245-730-104	Sequence 104, App
37	36	12.9	1036	4	US-10-245-739-104	Sequence 104, App
38	36	12.9	1036	4	US-10-246-210-104	Sequence 104, App
39	36	12.9	1036	4	US-10-239-196-104	Sequence 104, App
40	36	12.9	1036	4	US-10-243-024-104	Sequence 104, App
41	36	12.9	1036	4	US-10-243-409-104	Sequence 104, App
42	36	12.9	1036	4	US-10-245-621-104	Sequence 104, App
43	36	12.9	1036	4	US-10-245-880-104	Sequence 104, App
44	36	12.9	1036	4	US-10-245-033-104	Sequence 104, App
45	36	12.9	1036	4	US-10-243-095-104	Sequence 104, App

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:29:01 ; Search time 23 Seconds  
(without alignments)  
347.208 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 169630 seqs, 28622889 residues

Word size : 0

Total number of hits satisfying chosen parameters: 169630

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Published\_Applications\_AA\_New:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep:\*  
7: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep:\*  
8: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB	ID	Description
1	279	100.0	456	6	US-10-966-483-34	Sequence 34, Appl
2	279	100.0	456	7	US-11-021-441-18	Sequence 18, Appl
3	279	100.0	479	6	US-10-966-483-36	Sequence 36, Appl
4	279	100.0	479	7	US-11-021-441-20	Sequence 20, Appl
5	279	100.0	490	6	US-10-966-483-42	Sequence 42, Appl
6	279	100.0	490	7	US-11-021-441-26	Sequence 26, Appl
7	279	100.0	497	6	US-10-966-483-38	Sequence 38, Appl
8	279	100.0	497	6	US-10-966-483-40	Sequence 40, Appl
9	279	100.0	497	7	US-11-021-441-22	Sequence 22, Appl
10	279	100.0	497	7	US-11-021-441-24	Sequence 24, Appl
11	279	100.0	976	6	US-10-966-483-2	Sequence 2, Appli
12	279	100.0	976	6	US-10-511-273-1	Sequence 1, Appli
13	279	100.0	976	7	US-11-233-796-2	Sequence 2, Appli
14	279	100.0	976	7	US-11-072-175-138	Sequence 138, App
15	279	100.0	976	7	US-11-203-251A-77	Sequence 77, Appl

16	279	100.0	1035	6	US-10-966-483-20	Sequence 20, Appl
17	279	100.0	1035	7	US-11-021-441-4	Sequence 4, Appli
18	36	12.9	1035	7	US-11-113-424-20	Sequence 20, Appl
19	36	12.9	1052	7	US-11-113-424-22	Sequence 22, Appl
20	30	10.8	984	7	US-11-113-424-60	Sequence 60, Appl
21	30	10.8	984	7	US-11-203-251A-85	Sequence 85, Appl
22	30	10.8	987	6	US-10-770-726-61	Sequence 61, Appl
23	30	10.8	987	7	US-11-203-251A-87	Sequence 87, Appl
24	30	10.8	995	7	US-11-113-424-62	Sequence 62, Appl
25	30	10.8	998	6	US-10-510-524-1	Sequence 1, Appli
26	30	10.8	998	7	US-11-203-251A-88	Sequence 88, Appl
27	30	10.8	1055	7	US-11-169-041-155	Sequence 155, App
28	30	10.8	1055	7	US-11-072-175-139	Sequence 139, App
29	30	10.8	1055	7	US-11-203-251A-86	Sequence 86, Appl
30	30	10.8	1055	7	US-11-051-720-1417	Sequence 1417, Ap
31	29	10.4	998	7	US-11-203-251A-83	Sequence 83, Appl
32	28	10.0	987	6	US-10-949-720-395	Sequence 395, App
33	28	10.0	987	7	US-11-203-251A-89	Sequence 89, Appl
34	28	10.0	990	6	US-10-821-234-1201	Sequence 1201, Ap
35	25	9.0	985	7	US-11-113-424-61	Sequence 61, Appl
36	25	9.0	986	7	US-11-203-251A-80	Sequence 80, Appl
37	23	8.2	983	7	US-11-113-424-59	Sequence 59, Appl
38	23	8.2	983	7	US-11-203-251A-78	Sequence 78, Appl
39	23	8.2	1005	7	US-11-113-424-63	Sequence 63, Appl
40	23	8.2	1015	7	US-11-203-251A-82	Sequence 82, Appl
41	23	8.2	1037	7	US-11-203-251A-81	Sequence 81, Appl
42	20	7.2	1005	7	US-11-203-251A-84	Sequence 84, Appl
43	15	5.4	15	6	US-10-966-483-16	Sequence 16, Appl
44	15	5.4	976	7	US-11-203-251A-76	Sequence 76, Appl
45	12	4.3	1124	7	US-11-195-197-9	Sequence 9, Appli

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:11:05 ; Search time 40 Seconds  
(without alignments)  
671.112 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 283416 seqs, 96216763 residues

Word size : 0

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR\_80:\*  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	279	100.0	976	2	A36355	protein-tyrosine k
2	77	27.6	426	2	I48759	protein-tyrosine k
3	77	27.6	975	2	I48974	receptor-protein t
4	77	27.6	977	2	S49004	tyrosine kinase Mp
5	36	12.9	334	2	T43450	hypothetical prote
6	36	12.9	948	2	S51605	receptor-like tyro
7	30	10.8	84	2	A24910	probable tyrosine
8	30	10.8	275	2	I48761	protein-tyrosine k
9	30	10.8	478	2	A57174	protein-tyrosine k
10	30	10.8	480	2	I48760	protein-tyrosine k
11	30	10.8	612	2	S33506	protein-tyrosine k
12	30	10.8	938	2	I49071	protein kinase - m
13	30	10.8	952	2	I50612	protein-tyrosine k
14	30	10.8	970	2	I78842	receptor protein-t
15	30	10.8	984	2	A39753	protein-tyrosine k
16	30	10.8	985	2	I51672	receptor tyrosine
17	30	10.8	988	2	I50611	protein-tyrosine k
18	30	10.8	993	2	I48653	mouse developmenta
19	30	10.8	995	2	A56599	embryo kinase 5 -
20	30	10.8	998	2	S37627	protein-tyrosine k

21	29	10.4	998	2	I58351	receptor protein-t
22	29	10.4	998	2	JC5672	receptor tyrosine
23	28	10.0	987	2	A54092	protein-tyrosine k
24	28	10.0	987	2	I48652	mouse developmenta
25	28	10.0	987	2	I48953	eph-related recept
26	25	9.0	849	2	I50617	protein-tyrosine k
27	25	9.0	985	2	I51549	receptor tyrosine
28	25	9.0	986	2	I78844	receptor protein-t
29	25	9.0	986	2	S78059	protein-tyrosine k
30	23	8.2	55	2	PT0186	protein-tyrosine k
31	23	8.2	57	2	S35727	protein-tyrosine k
32	23	8.2	490	2	I50613	protein-tyrosine k
33	23	8.2	877	2	I48967	brain-specific kin
34	23	8.2	893	2	S51603	receptor-like tyro
35	23	8.2	898	2	S47489	receptor tyrosine
36	23	8.2	981	2	S51604	receptor-like tyro
37	23	8.2	983	2	B45583	receptor tyrosine
38	23	8.2	983	2	A38224	protein-tyrosine k
39	23	8.2	983	2	A45583	receptor tyrosine
40	23	8.2	991	2	I78843	receptor protein-t
41	23	8.2	1005	2	S49015	receptor tyrosine
42	23	8.2	1013	2	I50615	receptor-type prot
43	19	6.8	57	2	PT0193	protein-tyrosine k
44	19	6.8	57	2	PT0188	protein-tyrosine k
45	19	6.8	57	2	PT0187	protein-tyrosine k

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:07:50 ; Search time 231 Seconds  
(without alignments)  
852.132 Million cell updates/sec

Title: US-10-601-324-1\_COPY\_605\_883  
Perfect score: 279  
Sequence: 1 TTEIHPSCVTRQKVIGAGEF.....FADIVSILDKLIRAPDSLKT 279

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 2166443 seqs, 705528306 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : UniProt\_05.80:\*  
1: uniprot\_sprot:\*  
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	279	100.0	976	1	EPHA2_HUMAN
2	279	100.0	976	2	Q8N3Z2_HUMAN
3	160	57.3	253	2	Q96HF4_HUMAN
4	77	27.6	977	1	EPHA2_MOUSE
5	55	19.7	55	2	Q90ZJ1_CHICK
6	52	18.6	963	2	Q5FWW9_XENLA
7	52	18.6	974	2	Q6DII4_XENTR
8	52	18.6	976	2	Q6NTV5_XENLA
9	52	18.6	977	2	Q9PWR5_XENLA
10	48	17.2	57	2	Q91999_XENLA
11	36	12.9	328	2	Q4T461_TETNG
12	36	12.9	334	2	Q9UF33_HUMAN
13	36	12.9	356	2	Q4T7X3_TETNG
14	36	12.9	639	2	Q8CCN2_MOUSE
15	36	12.9	948	1	EPHA6_RAT
16	36	12.9	963	2	Q4RQW0_TETNG
17	36	12.9	976	2	Q90ZN9_BRARE
18	36	12.9	1006	2	Q4RV12_TETNG
19	36	12.9	1035	1	EPHA6_MOUSE
20	36	12.9	1072	2	Q4SWL0_TETNG
21	32	11.5	780	2	Q4SQX3_TETNG
22	31	11.1	536	2	Q70W06_CIOIN
					P29317 homo sapien
					Q8n3z2 homo sapien
					Q96hf4 homo sapien
					Q03145 mus musculu
					Q90zj1 gallus gall
					Q5fww9 xenopus lae
					Q6dii4 xenopus tro
					Q6ntv5 xenopus lae
					Q9pwr5 xenopus lae
					Q91999 xenopus lae
					Q4t461 tetraodon n
					Q9uf33 homo sapien
					Q4t7x3 tetraodon n
					Q8ccn2 mus musculu
					P54758 rattus norv
					Q4rqw0 tetraodon n
					Q90zn9 brachydanio
					Q4rv12 tetraodon n
					Q62413 mus musculu
					Q4swl0 tetraodon n
					Q4sqx3 tetraodon n
					Q70w06 ciona intes



23	31	11.1	1006	2	Q4H3M7_CIOIN	Q4h3m7 ciona intes
24	30	10.8	84	2	Q7LZG9_CHICK	Q7lzg9 gallus gall
25	30	10.8	88	2	Q4RDZ6_TETNG	Q4rdz6 tetraodon n
26	30	10.8	179	2	Q4TFI7_TETNG	Q4tfi7 tetraodon n
27	30	10.8	570	2	Q4S771_TETNG	Q4s771 tetraodon n
28	30	10.8	885	2	Q4RVA1_TETNG	Q4rva1 tetraodon n
29	30	10.8	902	1	EPB1B_XENLA	Q91736 xenopus lae
30	30	10.8	938	2	Q60669_MOUSE	Q60669 mus musculu
31	30	10.8	943	2	Q8CBE2_MOUSE	Q8cbe2 mus musculu
32	30	10.8	946	2	Q5TFU3_HUMAN	Q5tfu3 homo sapien
33	30	10.8	950	2	Q4SP88_TETNG	Q4sp88 tetraodon n
34	30	10.8	972	2	Q5T0U6_HUMAN	Q5t0u6 homo sapien
35	30	10.8	974	1	EPHB3_XENLA	Q91735 xenopus lae
36	30	10.8	974	2	Q6DFG4_XENLA	Q6dfg4 xenopus lae
37	30	10.8	974	2	Q6NRE9_XENLA	Q6nre9 xenopus lae
38	30	10.8	984	1	EPHB1_CHICK	Q07494 gallus gall
39	30	10.8	984	1	EPHB1_HUMAN	P54762 homo sapien
40	30	10.8	984	1	EPHB1_RAT	P09759 rattus norv
41	30	10.8	984	2	Q8CBF3_MOUSE	Q8cbf3 mus musculu
42	30	10.8	984	2	Q6PG23_MOUSE	Q6pg23 mus musculu
43	30	10.8	985	1	EPB1A_XENLA	Q91571 xenopus lae
44	30	10.8	987	2	Q5T0U8_HUMAN	Q5t0u8 homo sapien
45	30	10.8	988	1	EPHB3_CHICK	Q07498 gallus gall

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 21, 2006, 23:29:51 ; Search time 36.1 Seconds  
(without alignments)  
2227.322 Million cell updates/sec

Title: US-10-601-324-2  
Perfect score: 1741  
Sequence: 1 gacccaaccaggctgtgtt.....ggctcccagcagcgaggc 915

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delect 7.0

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 4886326

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+\_n2p.model -DEV=xlp  
-Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124020\_20217/app\_query.fasta\_1  
-DB=A\_Geneseq -QFMT=fastan -SUFFIX=n2p.rag -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0  
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45  
-DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15 -MODE=LOCAL  
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abss02p  
-USER=US10601324\_@CGN\_1\_1\_348\_@runat\_21032006\_124020\_20217 -NCPU=6 -ICPU=3  
-NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : A\_Geneseq\_21:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*  
9: geneseqp2005s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	%	Query				
No.	Score	Match Length DB	ID			Description
-----						

1	1590	91.3	456	9	ADZ66216	Adz66216	Primary a
2	1590	91.3	456	9	AEB80037	Aeb80037	Human Eph
3	1590	91.3	456	9	AEB72924	Aeb72924	Human Eph
4	1590	91.3	479	9	ADZ66218	Adz66218	Protein e
5	1590	91.3	479	9	AEB80039	Aeb80039	Human Eph
6	1590	91.3	479	9	AEB72926	Aeb72926	Fusion pr
7	1590	91.3	490	9	ADZ66223	Adz66223	Protein e
8	1590	91.3	490	9	AEB80045	Aeb80045	Human Eph
9	1590	91.3	490	9	AEB72932	Aeb72932	Fusion pr
10	1590	91.3	497	9	ADZ66220	Adz66220	Protein e
11	1590	91.3	497	9	AEB80043	Aeb80043	Human Eph
12	1590	91.3	497	9	AEB80041	Aeb80041	Human Eph
13	1590	91.3	497	9	AEB72928	Aeb72928	Fusion pr
14	1590	91.3	497	9	AEB72930	Aeb72930	Fusion pr
15	1590	91.3	963	8	ABM83447	Abm83447	Human dia
16	1590	91.3	976	7	ADE40423	Ade40423	Human eph
17	1590	91.3	976	7	ADJ95092	Adj95092	Novel NOV
18	1590	91.3	976	8	ADL61214	Adl61214	Human pro
19	1590	91.3	976	8	ADN03964	Adn03964	Antipsori
20	1590	91.3	976	9	ADU79818	Adu79818	Human Eph
21	1590	91.3	976	9	ADU79822	Adu79822	Human Eph
22	1590	91.3	976	9	ADV94805	Adv94805	Human ADP
23	1590	91.3	976	9	ADW96093	Adw96093	Human Eph
24	1590	91.3	976	9	ADZ66185	Adz66185	EphA2 pol
25	1590	91.3	976	9	AEB72892	Aeb72892	Human rec
26	1590	91.3	987	8	ADX97538	Adx97538	Pancreati
27	1590	91.3	1035	9	ADZ66203	Adz66203	Protein e
28	1590	91.3	1035	9	AEB80023	Aeb80023	Human Eph
29	1590	91.3	1035	9	AEB72910	Aeb72910	Fusion pr
30	1544	88.7	977	9	AEA55026	Aea55026	Mouse tyr
31	1544	88.7	977	9	AEA55035	Aea55035	Mouse eph
32	1194.5	68.6	710	2	AAR75714	Aar75714	Eph-relat
33	1194.5	68.6	722	2	AAR75705	Aar75705	Eph-relat
34	1194.5	68.6	744	2	AAR75713	Aar75713	Eph-relat
35	1192.5	68.5	877	2	AAW71628	Aaw71628	Mouse Bsk
36	1192.5	68.5	1041	9	ADV97895	Adv97895	Murine pr
37	1189.5	68.3	953	5	ABP52826	Abp52826	Human rec
38	1189.5	68.3	975	5	ABP52827	Abp52827	Human Ehk
39	1189.5	68.3	991	2	AAR85090	Aar85090	EPH-like
40	1189.5	68.3	1037	5	ABG61868	Abg61868	Prostate
41	1189.5	68.3	1037	6	ABR44241	Abr44241	Tyrosine
42	1189.5	68.3	1037	7	ADE31683	Ade31683	Human 141
43	1184.5	68.0	928	2	AAR97853	Aar97853	Rat REK7
44	1177.5	67.6	1005	2	AAW83147	Aaw83147	Rat recep
45	1156.5	66.4	849	2	AAR75706	Aar75706	Eph-relat

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 21, 2006, 23:45:21 ; Search time 8.1 Seconds  
(without alignments)  
1867.858 Million cell updates/sec

Title: US-10-601-324-2  
Perfect score: 1741  
Sequence: 1 gacccaaccaggctgtgtt.....ggctcccagcacgagcggc 915

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 1144120

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+\_n2p.model -DEV=xlp  
-Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124025\_20308/app\_query.fasta\_1  
-DB=Issued\_Patents\_AA -QFMT=fastan -SUFFIX=n2p.ra1 -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi  
-LIST=45 -DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-HOST=abss02p -USER=US10601324\_CGN\_1\_1\_71\_@runat\_21032006\_124025\_20308  
-NCPU=6 -ICPU=3 -NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG  
-DEV\_TIMEOUT=120 -WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5\_COMB.pep:\*  
2: /cgn2\_6/ptodata/1/iaa/6\_COMB.pep:\*  
3: /cgn2\_6/ptodata/1/iaa/H\_COMB.pep:\*  
4: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*  
5: /cgn2\_6/ptodata/1/iaa/RE\_COMB.pep:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1590	91.3	976	1	US-08-449-645A-18	Sequence 18, Appl
2	1590	91.3	976	1	US-08-702-367A-18	Sequence 18, Appl
3	1590	91.3	976	2	US-09-949-016-6499	Sequence 6499, Ap

4	1590	91.3	976	4	PCT-US95-04681-18	Sequence 18, Appl
5	1590	91.3	1013	2	US-09-949-016-7991	Sequence 7991, Ap
6	1569	90.1	977	1	US-08-673-789-8	Sequence 8, Appli
7	1194.5	68.6	490	1	US-08-673-789-13	Sequence 13, Appl
8	1194.5	68.6	710	1	US-08-162-809-22	Sequence 22, Appl
9	1194.5	68.6	722	1	US-08-162-809-4	Sequence 4, Appli
10	1194.5	68.6	744	1	US-08-162-809-20	Sequence 20, Appl
11	1192.5	68.5	877	1	US-08-673-789-2	Sequence 2, Appli
12	1189.5	68.3	953	2	US-09-751-389-7	Sequence 7, Appli
13	1189.5	68.3	967	1	US-08-449-645A-30	Sequence 30, Appl
14	1189.5	68.3	967	1	US-08-702-367A-30	Sequence 30, Appl
15	1189.5	68.3	975	2	US-09-751-389-8	Sequence 8, Appli
16	1189.5	68.3	991	1	US-08-449-645A-13	Sequence 13, Appl
17	1189.5	68.3	991	1	US-08-702-367A-13	Sequence 13, Appl
18	1189.5	68.3	991	4	PCT-US95-04681-13	Sequence 13, Appl
19	1184.5	68.0	928	1	US-08-442-248-2	Sequence 2, Appli
20	1184.5	68.0	928	1	US-08-440-815-2	Sequence 2, Appli
21	1184.5	68.0	928	2	US-08-486-449-2	Sequence 2, Appli
22	1184.5	68.0	928	2	US-08-578-684-2	Sequence 2, Appli
23	1177.5	67.6	1005	1	US-08-469-537A-103	Sequence 103, App
24	1156.5	66.4	849	1	US-08-162-809-6	Sequence 6, Appli
25	1156.5	66.4	986	1	US-08-673-789-3	Sequence 3, Appli
26	1154.5	66.3	849	1	US-08-673-789-10	Sequence 10, Appl
27	1152.5	66.2	986	1	US-08-449-645A-15	Sequence 15, Appl
28	1152.5	66.2	986	1	US-08-702-367A-15	Sequence 15, Appl
29	1152.5	66.2	986	4	PCT-US95-04681-15	Sequence 15, Appl
30	1152.5	66.2	997	2	US-09-949-016-7171	Sequence 7171, Ap
31	1152.5	66.2	1104	1	US-08-222-616-36	Sequence 36, Appl
32	1152.5	66.2	1104	2	US-08-446-648-36	Sequence 36, Appl
33	1152.5	66.2	1104	2	US-09-982-610-36	Sequence 36, Appl
34	1152.5	66.2	1104	4	PCT-US95-04228-36	Sequence 36, Appl
35	1151.5	66.1	968	2	US-09-751-389-6	Sequence 6, Appli
36	1151.5	66.1	983	1	US-08-162-809-16	Sequence 16, Appl
37	1149.5	66.0	982	1	US-08-673-789-4	Sequence 4, Appli
38	1149.5	66.0	983	1	US-08-449-645A-21	Sequence 21, Appl
39	1149.5	66.0	983	1	US-08-702-367A-21	Sequence 21, Appl
40	1149.5	66.0	983	2	US-09-771-161A-227	Sequence 227, App
41	1149.5	66.0	983	4	PCT-US95-04681-21	Sequence 21, Appl
42	1146.5	65.9	983	1	US-08-167-919A-10	Sequence 10, Appl
43	1146.5	65.9	983	2	US-08-715-106-10	Sequence 10, Appl
44	1146.5	65.9	983	2	US-09-442-649-10	Sequence 10, Appl
45	1143.5	65.7	998	1	US-08-449-645A-17	Sequence 17, Appl

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 22, 2006, 00:04:02 ; Search time 34.1 Seconds  
(without alignments)  
2242.310 Million cell updates/sec

Title: US-10-601-324-2  
Perfect score: 1741  
Sequence: 1 gaccccaaccaggctgtgtt.....ggctccccagcacgagcggc 915

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delect 7.0

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 3735138

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame+\_n2p.model -DEV=xlp  
-Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124031\_20479/app\_query.fasta\_1  
-DB=Published\_Applications\_AA\_Main -QFMT=fastan -SUFFIX=n2p.rapbm  
-MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1  
-MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR\_SCORE=pct  
-THR\_MAX=100 -THR\_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext  
-HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abss02p  
-USER=US10601324\_@CGN\_1\_1\_307\_@runat\_21032006\_124031\_20479 -NCPU=6 -ICPU=3  
-NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published\_Applications\_AA\_Main:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	1590	91.3	976	US-10-366-288-2	Sequence 2, Appli
2	1590	91.3	976	US-10-287-226-320	Sequence 320, App

3	1590	91.3	976	4	US-10-648-593-138	Sequence 138, App
4	1590	91.3	976	5	US-10-616-403-6	Sequence 6, Appli
5	1590	91.3	976	5	US-10-897-711-2	Sequence 2, Appli
6	1523.5	87.5	297	5	US-10-794-493-15	Sequence 15, Appl
7	1194.5	68.6	490	5	US-10-732-923-13669	Sequence 13669, A
8	1194.5	68.6	827	5	US-10-732-923-13666	Sequence 13666, A
9	1194.5	68.6	991	5	US-10-732-923-13667	Sequence 13667, A
10	1194.5	68.6	1013	5	US-10-732-923-13668	Sequence 13668, A
11	1192.5	68.5	1041	5	US-10-840-512-215	Sequence 215, App
12	1189.5	68.3	369	5	US-10-732-923-13681	Sequence 13681, A
13	1189.5	68.3	953	4	US-10-412-277-7	Sequence 7, Appli
14	1189.5	68.3	975	4	US-10-412-277-8	Sequence 8, Appli
15	1189.5	68.3	991	3	US-09-823-187-44	Sequence 44, Appl
16	1189.5	68.3	1037	4	US-10-316-124-3	Sequence 3, Appli
17	1189.5	68.3	1037	4	US-10-353-690-40	Sequence 40, Appl
18	1189.5	68.3	1037	6	US-11-064-551-3	Sequence 3, Appli
19	1185.5	68.1	295	5	US-10-794-493-13	Sequence 13, Appl
20	1184.5	68.0	928	2	US-08-578-684-2	Sequence 2, Appli
21	1177.5	67.6	1005	4	US-10-029-020-63	Sequence 63, Appl
22	1152.5	66.2	295	5	US-10-794-493-12	Sequence 12, Appl
23	1152.5	66.2	985	4	US-10-029-020-61	Sequence 61, Appl
24	1152.5	66.2	986	5	US-10-723-860-597	Sequence 597, App
25	1152.5	66.2	986	5	US-10-756-149-4880	Sequence 4880, Ap
26	1152.5	66.2	997	5	US-10-450-763-36048	Sequence 36048, A
27	1152.5	66.2	1026	5	US-10-450-763-53290	Sequence 53290, A
28	1152.5	66.2	1104	3	US-09-982-610-36	Sequence 36, Appl
29	1151.5	66.1	968	4	US-10-412-277-6	Sequence 6, Appli
30	1151.5	66.1	983	5	US-10-732-923-13675	Sequence 13675, A
31	1149.5	66.0	983	3	US-09-771-161A-227	Sequence 227, App
32	1149.5	66.0	983	4	US-10-205-823-97	Sequence 97, Appl
33	1149.5	66.0	983	4	US-10-345-680-2	Sequence 2, Appli
34	1149.5	66.0	983	4	US-10-295-027-602	Sequence 602, App
35	1149.5	66.0	983	4	US-10-029-020-59	Sequence 59, Appl
36	1149.5	66.0	983	5	US-10-794-514A-467	Sequence 467, App
37	1149.5	66.0	983	5	US-10-489-125B-11	Sequence 11, Appl
38	1149.5	66.0	983	6	US-11-051-454-97	Sequence 97, Appl
39	1147.5	65.9	295	5	US-10-794-493-11	Sequence 11, Appl
40	1143.5	65.7	295	5	US-10-794-493-6	Sequence 6, Appli
41	1143.5	65.7	295	5	US-10-794-493-9	Sequence 9, Appli
42	1143.5	65.7	993	3	US-09-823-187-39	Sequence 39, Appl
43	1143.5	65.7	993	3	US-09-823-187-41	Sequence 41, Appl
44	1143.5	65.7	998	3	US-09-823-187-40	Sequence 40, Appl
45	1142.5	65.6	295	5	US-10-794-493-8	Sequence 8, Appli

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 22, 2006, 00:05:47 ; Search time 3.6 Seconds  
(without alignments)  
1454.997 Million cell updates/sec

Title: US-10-601-324-2  
Perfect score: 1741  
Sequence: 1 gaccccaaccaggctgtgtt.....ggctccccagcagcgaggc 915

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delect 7.0

Searched: 169630 seqs, 28622889 residues

Total number of hits satisfying chosen parameters: 339260

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame+\_n2p.model -DEV=xlp  
-Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124034\_20541/app\_query.fasta\_1  
-DB=Published\_Applications\_AA\_New -QFMT=fastan -SUFFIX=n2p.rapbn -MINMATCH=0.1  
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62  
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100  
-THR\_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0  
-MAXLEN=2000000000 -HOST=abss02p  
-USER=US10601324 @CGN\_1\_1\_17 @runat\_21032006\_124034\_20541 -NCPU=6 -ICPU=3  
-NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published\_Applications\_AA\_New:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep:\*  
7: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep:\*  
8: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
-----					



1	1590	91.3	456	6	US-10-966-483-34	Sequence 34, Appl
2	1590	91.3	456	7	US-11-021-441-18	Sequence 18, Appl
3	1590	91.3	479	6	US-10-966-483-36	Sequence 36, Appl
4	1590	91.3	479	7	US-11-021-441-20	Sequence 20, Appl
5	1590	91.3	490	6	US-10-966-483-42	Sequence 42, Appl
6	1590	91.3	490	7	US-11-021-441-26	Sequence 26, Appl
7	1590	91.3	497	6	US-10-966-483-38	Sequence 38, Appl
8	1590	91.3	497	6	US-10-966-483-40	Sequence 40, Appl
9	1590	91.3	497	7	US-11-021-441-22	Sequence 22, Appl
10	1590	91.3	497	7	US-11-021-441-24	Sequence 24, Appl
11	1590	91.3	976	6	US-10-966-483-2	Sequence 2, Appli
12	1590	91.3	976	6	US-10-511-273-1	Sequence 1, Appli
13	1590	91.3	976	7	US-11-233-796-2	Sequence 2, Appli
14	1590	91.3	976	7	US-11-072-175-138	Sequence 138, App
15	1590	91.3	976	7	US-11-203-251A-77	Sequence 77, Appl
16	1590	91.3	1035	6	US-10-966-483-20	Sequence 20, Appl
17	1590	91.3	1035	7	US-11-021-441-4	Sequence 4, Appli
18	1189.5	68.3	1015	7	US-11-203-251A-82	Sequence 82, Appl
19	1189.5	68.3	1037	7	US-11-203-251A-81	Sequence 81, Appl
20	1177.5	67.6	1005	7	US-11-113-424-63	Sequence 63, Appl
21	1152.5	66.2	985	7	US-11-113-424-61	Sequence 61, Appl
22	1152.5	66.2	986	7	US-11-203-251A-80	Sequence 80, Appl
23	1149.5	66.0	983	7	US-11-113-424-59	Sequence 59, Appl
24	1149.5	66.0	983	7	US-11-203-251A-78	Sequence 78, Appl
25	1143.5	65.7	998	7	US-11-203-251A-83	Sequence 83, Appl
26	1117.5	64.2	984	7	US-11-203-251A-85	Sequence 85, Appl
27	1114.5	64.0	984	7	US-11-113-424-60	Sequence 60, Appl
28	1106.5	63.6	987	6	US-10-770-726-61	Sequence 61, Appl
29	1106.5	63.6	987	7	US-11-203-251A-87	Sequence 87, Appl
30	1106.5	63.6	1055	7	US-11-169-041-155	Sequence 155, App
31	1106.5	63.6	1055	7	US-11-072-175-139	Sequence 139, App
32	1106.5	63.6	1055	7	US-11-203-251A-86	Sequence 86, Appl
33	1106.5	63.6	1055	7	US-11-051-720-1417	Sequence 1417, Ap
34	1105.5	63.5	995	7	US-11-113-424-62	Sequence 62, Appl
35	1090.5	62.6	1035	7	US-11-113-424-20	Sequence 20, Appl
36	1090.5	62.6	1052	7	US-11-113-424-22	Sequence 22, Appl
37	1087.5	62.5	998	6	US-10-510-524-1	Sequence 1, Appli
38	1087.5	62.5	998	7	US-11-203-251A-88	Sequence 88, Appl
39	1043.5	59.9	1005	7	US-11-203-251A-84	Sequence 84, Appl
40	1038.5	59.6	987	6	US-10-949-720-395	Sequence 395, App
41	1038.5	59.6	987	7	US-11-203-251A-89	Sequence 89, Appl
42	1038.5	59.6	990	6	US-10-821-234-1201	Sequence 1201, Ap
43	970	55.7	976	7	US-11-203-251A-76	Sequence 76, Appl
44	770.5	44.3	1006	7	US-11-203-251A-90	Sequence 90, Appl
45	620.5	35.6	258	6	US-10-877-346-75	Sequence 75, Appl

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 21, 2006, 23:36:36 ; Search time 8.9 Seconds  
(without alignments)  
1978.390 Million cell updates/sec

Title: US-10-601-324-2  
Perfect score: 1741  
Sequence: 1 gaccccaaccaggctgtgtt.....ggctccccagcagcagcggc 915

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 566832

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame+\_n2p.model -DEV=xlp  
-Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124023\_20268/app\_query.fasta\_1  
-DB=PIR -QFMT=fastan -SUFFIX=n2p.rpr -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0  
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45  
-DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15 -MODE=LOCAL  
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abss02p  
-USER=US10601324\_CGN\_1\_1\_63@runat\_21032006\_124023\_20268 -NCPU=6 -ICPU=3  
-NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : PIR\_80:\*  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1590	91.3	976	2	A36355	protein-tyrosine k
2	1551	89.1	426	2	I48759	protein-tyrosine k
3	1544	88.7	977	2	S49004	tyrosine kinase Mp
4	1519	87.2	975	2	I48974	receptor-protein t
5	1194.5	68.6	490	2	I50613	protein-tyrosine k

6	1194.5	68.6	1013	2	I50615	receptor-type prot
7	1192.5	68.5	877	2	I48967	brain-specific kin
8	1189.5	68.3	991	2	I78843	receptor protein-t
9	1184.5	68.0	898	2	S47489	receptor tyrosine
10	1177.5	67.6	893	2	S51603	receptor-like tyro
11	1177.5	67.6	981	2	S51604	receptor-like tyro
12	1177.5	67.6	1005	2	S49015	receptor tyrosine
13	1156.5	66.4	849	2	I50617	protein-tyrosine k
14	1153.5	66.3	986	2	S78059	protein-tyrosine k
15	1152.5	66.2	985	2	I51549	receptor tyrosine
16	1152.5	66.2	986	2	I78844	receptor protein-t
17	1151.5	66.1	983	2	B45583	receptor tyrosine
18	1149.5	66.0	983	2	A38224	protein-tyrosine k
19	1143.5	65.7	998	2	I58351	receptor protein-t
20	1135.5	65.2	998	2	JC5672	receptor tyrosine
21	1121.5	64.4	983	2	A45583	receptor tyrosine
22	1114.5	64.0	984	2	A39753	protein-tyrosine k
23	1111.5	63.8	952	2	I50612	protein-tyrosine k
24	1106.5	63.6	480	2	I48760	protein-tyrosine k
25	1105.5	63.5	995	2	A56599	embryo kinase 5 -
26	1103.5	63.4	478	2	A57174	protein-tyrosine k
27	1102.5	63.3	970	2	I78842	receptor protein-t
28	1091.5	62.7	948	2	S51605	receptor-like tyro
29	1088.5	62.5	988	2	I50611	protein-tyrosine k
30	1088	62.5	985	2	I51672	receptor tyrosine
31	1087.5	62.5	998	2	S37627	protein-tyrosine k
32	1083.5	62.2	993	2	I48653	mouse developmenta
33	1049.5	60.3	938	2	I49071	protein kinase - m
34	1044.5	60.0	612	2	S33506	protein-tyrosine k
35	1038.5	59.6	987	2	A54092	protein-tyrosine k
36	1035.5	59.5	987	2	I48953	eph-related recept
37	1029.5	59.1	987	2	I48652	mouse developmenta
38	994.5	57.1	372	2	S23363	protein-tyrosine k
39	974	55.9	1019	2	T13039	tyrosine kinase re
40	941	54.0	984	1	A34076	protein-tyrosine k
41	793.5	45.6	919	2	T29581	hypothetical prote
42	781	44.9	1122	2	T42400	Eph receptor tyros
43	770.5	44.3	1006	2	JC5526	kinase-defective E
44	724	41.6	275	2	I48761	protein-tyrosine k
45	633.5	36.4	334	2	T43450	hypothetical prote

GenCore version 5.1.7

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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: March 21, 2006, 23:30:21 ; Search time 50.6 Seconds  
 (without alignments)  
 2551.614 Million cell updates/sec

Title: US-10-601-324-2  
 Perfect score: 1741  
 Sequence: 1 gaccccaaccaggctgtgtt.....ggctccccagcacgagcggc 915

Scoring table: BLOSUM62  
 Xgapop 10.0 , Xgapext 0.5  
 Ygapop 10.0 , Ygapext 0.5  
 Fgapop 6.0 , Fgapext 7.0  
 Delop 6.0 , Delext 7.0

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 4332886

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Command line parameters:

-MODEL=frame+\_n2p.model -DEV=xlp  
 -Q=/abss/ABSSWEB\_spool/US10601324/runat\_21032006\_124022\_20229/app\_query.fasta\_1  
 -DB=UniProt -QFMT=fastan -SUFFIX=n2p.rup -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0  
 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45  
 -DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15 -MODE=LOCAL  
 -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abss02p  
 -USER=US10601324\_CGN\_1\_1\_466@runat\_21032006\_124022\_20229 -NCPU=6 -ICPU=3  
 -NO\_MMAP -NEG\_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV\_TIMEOUT=120  
 -WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : UniProt\_05.80:\*  
 1: uniprot\_sprot:\*  
 2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	1590	91.3	976	1	EPHA2_HUMAN P29317 homo sapien
2	1590	91.3	976	2	Q8N3Z2_HUMAN Q8n3z2 homo sapien
3	1544	88.7	977	1	EPHA2_MOUSE Q03145 mus musculu
4	1424.5	81.8	974	2	Q6DII4_XENTR Q6dii4 xenopus tro
5	1412.5	81.1	963	2	Q5FWW9_XENLA Q5fww9 xenopus lae
6	1407.5	80.8	976	2	Q6NTV5_XENLA Q6ntv5 xenopus lae
7	1355	77.8	977	2	Q9PWR5_XENLA Q9pwr5 xenopus lae

8	1309.5	75.2	712	2	Q4SC90_TETNG	Q4sc90 tetraodon n
9	1274.5	73.2	1042	2	Q4RXA0_TETNG	Q4rxa0 tetraodon n
10	1246.5	71.6	666	2	O73876_BRARE	O73876 brachydanio
11	1246.5	71.6	984	2	Q6NZS1_BRARE	Q6nzs1 brachydanio
12	1194.5	68.6	1013	1	EPHA5_CHICK	P54755 gallus gall
13	1192.5	68.5	877	1	EPHA5_MOUSE	Q60629 mus musculu
14	1189.5	68.3	369	2	Q95K57_MACFA	Q95k57 macaca fasc
15	1189.5	68.3	819	2	Q6PFV6_MOUSE	Q6pfv6 mus musculu
16	1189.5	68.3	1017	2	Q59FT4_HUMAN	Q59ft4 homo sapien
17	1189.5	68.3	1037	1	EPHA5_HUMAN	P54756 homo sapien
18	1181.5	67.9	969	2	Q7Z3F2_HUMAN	Q7z3f2 homo sapien
19	1177.5	67.6	1005	1	EPHA5_RAT	P54757 rattus norv
20	1156.5	66.4	986	1	EPHA4_CHICK	Q07496 gallus gall
21	1153.5	66.3	927	2	Q99KA8_MOUSE	Q99ka8 mus musculu
22	1153.5	66.3	986	1	EPHA4_MOUSE	Q03137 mus musculu
23	1153.5	66.3	986	2	Q80VZ2_MOUSE	Q80vz2 mus musculu
24	1152.5	66.2	711	2	Q53TA0_HUMAN	Q53ta0 homo sapien
25	1152.5	66.2	949	2	Q58F15_HUMAN	Q58f15 homo sapien
26	1152.5	66.2	985	1	EPA4B_XENLA	Q91694 xenopus lae
27	1152.5	66.2	986	1	EPHA4_HUMAN	P54764 homo sapien
28	1152.5	66.2	986	2	Q7ZYM7_XENLA	Q7zym7 xenopus lae
29	1152	66.2	986	1	EPA4A_XENLA	Q91845 xenopus lae
30	1151.5	66.1	664	2	Q4RYX7_TETNG	Q4ryx7 tetraodon n
31	1151.5	66.1	983	1	EPHA3_CHICK	P29318 gallus gall
32	1151.5	66.1	986	2	Q5ZEW1_BRARE	Q5zew1 brachydanio
33	1149.5	66.0	983	1	EPHA3_HUMAN	P29320 homo sapien
34	1149.5	66.0	984	2	Q8BRB1_MOUSE	Q8brb1 mus musculu
35	1149.5	66.0	984	2	Q8C3U1_MOUSE	Q8c3u1 mus musculu
36	1145.5	65.8	983	2	Q6P4R6_HUMAN	Q6p4r6 homo sapien
37	1143.5	65.7	993	1	EPHA7_CHICK	O42422 gallus gall
38	1143.5	65.7	998	1	EPHA7_HUMAN	Q15375 homo sapien
39	1142.5	65.6	963	2	Q4RQW0_TETNG	Q4rqw0 tetraodon n
40	1142.5	65.6	984	1	EPHA3_RAT	O08680 rattus norv
41	1142.5	65.6	998	1	EPHA7_RAT	P54759 rattus norv
42	1139.5	65.5	994	2	Q8R381_MOUSE	Q8r381 mus musculu
43	1139.5	65.5	998	2	Q8BSU8_MOUSE	Q8bsu8 mus musculu
44	1135.5	65.2	998	1	EPHA7_MOUSE	Q61772 mus musculu
45	1134.5	65.2	976	2	Q90ZN9_BRARE	Q90zn9 brachydanio

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:35:54 ; Search time 70.7212 Seconds  
(without alignments)  
2068.873 Million cell updates/sec

Title: US-10-601-324-3  
Perfect score: 1759  
Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTADFDPVRSIRLPSTSG 333

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_21:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*  
9: geneseqp2005s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	1590.5	90.4	456	9 ADZ66216	Adz66216 Primary a
2	1590.5	90.4	456	9 AEB80037	Aeb80037 Human Eph
3	1590.5	90.4	456	9 AEB72924	Aeb72924 Human Eph
4	1590.5	90.4	963	8 ABM83447	Abm83447 Human dia
5	1590.5	90.4	976	7 ADE40423	Ade40423 Human eph
6	1590.5	90.4	976	7 ADJ95092	Adj95092 Novel NOV
7	1590.5	90.4	976	8 ADL61214	Adl61214 Human pro
8	1590.5	90.4	976	8 ADN03964	Adn03964 Antipsori
9	1590.5	90.4	976	9 ADU79818	Adu79818 Human Eph
10	1590.5	90.4	976	9 ADU79822	Adu79822 Human Eph
11	1590.5	90.4	976	9 ADV94805	Adv94805 Human ADP
12	1590.5	90.4	976	9 ADW96093	Adw96093 Human Eph
13	1590.5	90.4	976	9 ADZ66185	Adz66185 EphA2 pol
14	1590.5	90.4	976	9 AEB72892	Aeb72892 Human rec
15	1590.5	90.4	987	8 ADX97538	Adx97538 Pancreati

16	1590.5	90.4	1035	9	ADZ66203	Adz66203	Protein e
17	1590.5	90.4	1035	9	AEB80023	Aeb80023	Human Eph
18	1590.5	90.4	1035	9	AEB72910	Aeb72910	Fusion pr
19	1590	90.4	479	9	ADZ66218	Adz66218	Protein e
20	1590	90.4	479	9	AEB80039	Aeb80039	Human Eph
21	1590	90.4	479	9	AEB72926	Aeb72926	Fusion pr
22	1590	90.4	490	9	ADZ66223	Adz66223	Protein e
23	1590	90.4	490	9	AEB80045	Aeb80045	Human Eph
24	1590	90.4	490	9	AEB72932	Aeb72932	Fusion pr
25	1590	90.4	497	9	ADZ66220	Adz66220	Protein e
26	1590	90.4	497	9	AEB80043	Aeb80043	Human Eph
27	1590	90.4	497	9	AEB80041	Aeb80041	Human Eph
28	1590	90.4	497	9	AEB72928	Aeb72928	Fusion pr
29	1590	90.4	497	9	AEB72930	Aeb72930	Fusion pr
30	1544	87.8	977	9	AEA55026	Aea55026	Mouse tyr
31	1544	87.8	977	9	AEA55035	Aea55035	Mouse eph
32	1201	68.3	710	2	AAR75714	Aar75714	Eph-relat
33	1201	68.3	722	2	AAR75705	Aar75705	Eph-relat
34	1201	68.3	744	2	AAR75713	Aar75713	Eph-relat
35	1199	68.2	877	2	AAW71628	Aaw71628	Mouse Bsk
36	1199	68.2	1041	9	ADV97895	Adv97895	Murine pr
37	1196	68.0	953	5	ABP52826	Abp52826	Human rec
38	1196	68.0	975	5	ABP52827	Abp52827	Human Ehk
39	1196	68.0	991	2	AAR85090	Aar85090	EPH-like
40	1196	68.0	1037	5	ABG61868	Abg61868	Prostate
41	1196	68.0	1037	6	ABR44241	Abr44241	Tyrosine
42	1196	68.0	1037	7	ADE31683	Ade31683	Human 141
43	1191	67.7	928	2	AAR97853	Aar97853	Rat REK7
44	1184	67.3	1005	2	AAW83147	Aaw83147	Rat recep
45	1156.5	65.7	849	2	AAR75706	Aar75706	Eph-relat

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:46:54 ; Search time 16.7899 Seconds  
(without alignments)  
1639.734 Million cell updates/sec

Title: US-10-601-324-3  
Perfect score: 1759  
Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTLADFDPVRSIRLPSTSG 333

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5\_COMB.pep:\*  
2: /cgn2\_6/ptodata/1/iaa/6\_COMB.pep:\*  
3: /cgn2\_6/ptodata/1/iaa/H\_COMB.pep:\*  
4: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*  
5: /cgn2\_6/ptodata/1/iaa/RE\_COMB.pep:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	1590.5	90.4	976	1 US-08-449-645A-18	Sequence 18, Appl
2	1590.5	90.4	976	1 US-08-702-367A-18	Sequence 18, Appl
3	1590.5	90.4	976	2 US-09-949-016-6499	Sequence 6499, Ap
4	1590.5	90.4	976	4 PCT-US95-04681-18	Sequence 18, Appl
5	1590.5	90.4	1013	2 US-09-949-016-7991	Sequence 7991, Ap
6	1569.5	89.2	977	1 US-08-673-789-8	Sequence 8, Appli
7	1201	68.3	490	1 US-08-673-789-13	Sequence 13, Appl
8	1201	68.3	710	1 US-08-162-809-22	Sequence 22, Appl
9	1201	68.3	722	1 US-08-162-809-4	Sequence 4, Appli
10	1201	68.3	744	1 US-08-162-809-20	Sequence 20, Appl
11	1199	68.2	877	1 US-08-673-789-2	Sequence 2, Appli
12	1196	68.0	953	2 US-09-751-389-7	Sequence 7, Appli
13	1196	68.0	967	1 US-08-449-645A-30	Sequence 30, Appl
14	1196	68.0	967	1 US-08-702-367A-30	Sequence 30, Appl
15	1196	68.0	975	2 US-09-751-389-8	Sequence 8, Appli
16	1196	68.0	991	1 US-08-449-645A-13	Sequence 13, Appl
17	1196	68.0	991	1 US-08-702-367A-13	Sequence 13, Appl
18	1196	68.0	991	4 PCT-US95-04681-13	Sequence 13, Appl



19	1191	67.7	928	1	US-08-442-248-2	Sequence 2, Appli
20	1191	67.7	928	1	US-08-440-815-2	Sequence 2, Appli
21	1191	67.7	928	2	US-08-486-449-2	Sequence 2, Appli
22	1191	67.7	928	2	US-08-578-684-2	Sequence 2, Appli
23	1184	67.3	1005	1	US-08-469-537A-103	Sequence 103, App
24	1156.5	65.7	849	1	US-08-162-809-6	Sequence 6, Appli
25	1156.5	65.7	986	1	US-08-673-789-3	Sequence 3, Appli
26	1154.5	65.6	849	1	US-08-673-789-10	Sequence 10, Appl
27	1152.5	65.5	986	1	US-08-449-645A-15	Sequence 15, Appl
28	1152.5	65.5	986	1	US-08-702-367A-15	Sequence 15, Appl
29	1152.5	65.5	986	4	PCT-US95-04681-15	Sequence 15, Appl
30	1152.5	65.5	997	2	US-09-949-016-7171	Sequence 7171, Ap
31	1152.5	65.5	1104	1	US-08-222-616-36	Sequence 36, Appl
32	1152.5	65.5	1104	2	US-08-446-648-36	Sequence 36, Appl
33	1152.5	65.5	1104	2	US-09-982-610-36	Sequence 36, Appl
34	1152.5	65.5	1104	4	PCT-US95-04228-36	Sequence 36, Appl
35	1151.5	65.5	968	2	US-09-751-389-6	Sequence 6, Appli
36	1151.5	65.5	983	1	US-08-162-809-16	Sequence 16, Appl
37	1151	65.4	998	1	US-08-449-645A-17	Sequence 17, Appl
38	1151	65.4	998	1	US-08-702-367A-17	Sequence 17, Appl
39	1151	65.4	998	2	US-09-949-016-6501	Sequence 6501, Ap
40	1151	65.4	998	4	PCT-US95-04681-17	Sequence 17, Appl
41	1151	65.4	1005	2	US-09-949-016-9901	Sequence 9901, Ap
42	1149.5	65.3	982	1	US-08-673-789-4	Sequence 4, Appli
43	1149.5	65.3	983	1	US-08-449-645A-21	Sequence 21, Appl
44	1149.5	65.3	983	1	US-08-702-367A-21	Sequence 21, Appl
45	1149.5	65.3	983	2	US-09-771-161A-227	Sequence 227, App

# Sequence Search Results: 10/601324

41

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:02:20 ; Search time 57.2383 Seconds  
(without alignments)  
2430.838 Million cell updates/sec

Title: US-10-601-324-3  
Perfect score: 1759  
Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTADFDPVRSIRLPSTSG 333

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published\_Applications\_AA\_Main:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US09\_PUBCOMB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US11\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	1590.5	90.4	976	4 US-10-366-288-2	Sequence 2, Appli
2	1590.5	90.4	976	4 US-10-287-226-320	Sequence 320, App
3	1590.5	90.4	976	4 US-10-648-593-138	Sequence 138, App
4	1590.5	90.4	976	5 US-10-616-403-6	Sequence 6, Appli
5	1590.5	90.4	976	5 US-10-897-711-2	Sequence 2, Appli
6	1523.5	86.6	297	5 US-10-794-493-15	Sequence 15, Appl
7	1201	68.3	490	5 US-10-732-923-13669	Sequence 13669, A
8	1201	68.3	827	5 US-10-732-923-13666	Sequence 13666, A
9	1201	68.3	991	5 US-10-732-923-13667	Sequence 13667, A
10	1201	68.3	1013	5 US-10-732-923-13668	Sequence 13668, A
11	1199	68.2	1041	5 US-10-840-512-215	Sequence 215, App
12	1196	68.0	369	5 US-10-732-923-13681	Sequence 13681, A
13	1196	68.0	953	4 US-10-412-277-7	Sequence 7, Appli
14	1196	68.0	975	4 US-10-412-277-8	Sequence 8, Appli
15	1196	68.0	991	3 US-09-823-187-44	Sequence 44, Appl
16	1196	68.0	1037	4 US-10-316-124-3	Sequence 3, Appli
17	1196	68.0	1037	4 US-10-353-690-40	Sequence 40, Appl
18	1196	68.0	1037	6 US-11-064-551-3	Sequence 3, Appli

19	1191	67.7	928	2	US-08-578-684-2	Sequence 2, Appli
20	1185.5	67.4	295	5	US-10-794-493-13	Sequence 13, Appl
21	1184	67.3	1005	4	US-10-029-020-63	Sequence 63, Appl
22	1152.5	65.5	295	5	US-10-794-493-12	Sequence 12, Appl
23	1152.5	65.5	985	4	US-10-029-020-61	Sequence 61, Appl
24	1152.5	65.5	986	5	US-10-723-860-597	Sequence 597, App
25	1152.5	65.5	986	5	US-10-756-149-4880	Sequence 4880, Ap
26	1152.5	65.5	997	5	US-10-450-763-36048	Sequence 36048, A
27	1152.5	65.5	1026	5	US-10-450-763-53290	Sequence 53290, A
28	1152.5	65.5	1104	3	US-09-982-610-36	Sequence 36, Appl
29	1151.5	65.5	968	4	US-10-412-277-6	Sequence 6, Appli
30	1151.5	65.5	983	5	US-10-732-923-13675	Sequence 13675, A
31	1151	65.4	993	3	US-09-823-187-39	Sequence 39, Appl
32	1151	65.4	993	3	US-09-823-187-41	Sequence 41, Appl
33	1151	65.4	998	3	US-09-823-187-40	Sequence 40, Appl
34	1150	65.4	998	3	US-09-823-187-43	Sequence 43, Appl
35	1149.5	65.3	983	3	US-09-771-161A-227	Sequence 227, App
36	1149.5	65.3	983	4	US-10-205-823-97	Sequence 97, Appl
37	1149.5	65.3	983	4	US-10-345-680-2	Sequence 2, Appli
38	1149.5	65.3	983	4	US-10-295-027-602	Sequence 602, App
39	1149.5	65.3	983	4	US-10-029-020-59	Sequence 59, Appl
40	1149.5	65.3	983	5	US-10-794-514A-467	Sequence 467, App
41	1149.5	65.3	983	5	US-10-489-125B-11	Sequence 11, Appl
42	1149.5	65.3	983	6	US-11-051-454-97	Sequence 97, Appl
43	1147.5	65.2	295	5	US-10-794-493-11	Sequence 11, Appl
44	1143.5	65.0	295	5	US-10-794-493-6	Sequence 6, Appli
45	1143.5	65.0	295	5	US-10-794-493-9	Sequence 9, Appli

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OM protein - protein search, using sw model

Run on: March 21, 2006, 23:03:25 ; Search time 8.14056 Seconds  
(without alignments)  
1170.855 Million cell updates/sec

Title: US-10-601-324-3  
Perfect score: 1759  
Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTADFDPVRSIRLPSTSG 333

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 169630 seqs, 28622889 residues

Total number of hits satisfying chosen parameters: 169630

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published\_Applications\_AA\_New:\*  
1: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*  
2: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*  
5: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pep:\*  
7: /cgn2\_6/ptodata/1/pubpaa/US11\_NEW\_PUB.pep:\*  
8: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1590.5	90.4	456	6	US-10-966-483-34	Sequence 34, Appl
2	1590.5	90.4	456	7	US-11-021-441-18	Sequence 18, Appl
3	1590.5	90.4	976	6	US-10-966-483-2	Sequence 2, Appli
4	1590.5	90.4	976	6	US-10-511-273-1	Sequence 1, Appli
5	1590.5	90.4	976	7	US-11-233-796-2	Sequence 2, Appli
6	1590.5	90.4	976	7	US-11-072-175-138	Sequence 138, App
7	1590.5	90.4	976	7	US-11-203-251A-77	Sequence 77, Appl
8	1590.5	90.4	1035	6	US-10-966-483-20	Sequence 20, Appl
9	1590.5	90.4	1035	7	US-11-021-441-4	Sequence 4, Appli
10	1590	90.4	479	6	US-10-966-483-36	Sequence 36, Appl
11	1590	90.4	479	7	US-11-021-441-20	Sequence 20, Appl
12	1590	90.4	490	6	US-10-966-483-42	Sequence 42, Appl
13	1590	90.4	490	7	US-11-021-441-26	Sequence 26, Appl
14	1590	90.4	497	6	US-10-966-483-38	Sequence 38, Appl
15	1590	90.4	497	6	US-10-966-483-40	Sequence 40, Appl
16	1590	90.4	497	7	US-11-021-441-22	Sequence 22, Appl

17	1590	90.4	497	7	US-11-021-441-24	Sequence 24, Appl
18	1196	68.0	1015	7	US-11-203-251A-82	Sequence 82, Appl
19	1196	68.0	1037	7	US-11-203-251A-81	Sequence 81, Appl
20	1184	67.3	1005	7	US-11-113-424-63	Sequence 63, Appl
21	1152.5	65.5	985	7	US-11-113-424-61	Sequence 61, Appl
22	1152.5	65.5	986	7	US-11-203-251A-80	Sequence 80, Appl
23	1151	65.4	998	7	US-11-203-251A-83	Sequence 83, Appl
24	1149.5	65.3	983	7	US-11-113-424-59	Sequence 59, Appl
25	1149.5	65.3	983	7	US-11-203-251A-78	Sequence 78, Appl
26	1118.5	63.6	984	7	US-11-203-251A-85	Sequence 85, Appl
27	1115.5	63.4	984	7	US-11-113-424-60	Sequence 60, Appl
28	1107.5	63.0	987	6	US-10-770-726-61	Sequence 61, Appl
29	1107.5	63.0	987	7	US-11-203-251A-87	Sequence 87, Appl
30	1107.5	63.0	1055	7	US-11-169-041-155	Sequence 155, App
31	1107.5	63.0	1055	7	US-11-072-175-139	Sequence 139, App
32	1107.5	63.0	1055	7	US-11-203-251A-86	Sequence 86, Appl
33	1107.5	63.0	1055	7	US-11-051-720-1417	Sequence 1417, Ap
34	1106.5	62.9	995	7	US-11-113-424-62	Sequence 62, Appl
35	1091.5	62.1	998	6	US-10-510-524-1	Sequence 1, Appli
36	1091.5	62.1	998	7	US-11-203-251A-88	Sequence 88, Appl
37	1090.5	62.0	1035	7	US-11-113-424-20	Sequence 20, Appl
38	1090.5	62.0	1052	7	US-11-113-424-22	Sequence 22, Appl
39	1050	59.7	1005	7	US-11-203-251A-84	Sequence 84, Appl
40	1044.5	59.4	987	6	US-10-949-720-395	Sequence 395, App
41	1044.5	59.4	987	7	US-11-203-251A-89	Sequence 89, Appl
42	1044.5	59.4	990	6	US-10-821-234-1201	Sequence 1201, Ap
43	970	55.1	976	7	US-11-203-251A-76	Sequence 76, Appl
44	772.5	43.9	1006	7	US-11-203-251A-90	Sequence 90, Appl
45	620.5	35.3	258	6	US-10-877-346-75	Sequence 75, Appl

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:41:59 ; Search time 13.9916 Seconds  
 (without alignments)  
 2289.959 Million cell updates/sec

Title: US-10-601-324-3  
 Perfect score: 1759  
 Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTADFDPVRSIRLPSTSG 333

Scoring table: BLOSUM62  
 Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : PIR\_80:\*  
 1: pir1:\*  
 2: pir2:\*  
 3: pir3:\*  
 4: pir4:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Query		DB	ID	Description
		Match	Length			
1	1590.5	90.4	976	2	A36355	protein-tyrosine k
2	1551	88.2	426	2	I48759	protein-tyrosine k
3	1544	87.8	977	2	S49004	tyrosine kinase Mp
4	1519	86.4	975	2	I48974	receptor-protein t
5	1201	68.3	490	2	I50613	protein-tyrosine k
6	1201	68.3	1013	2	I50615	receptor-type prot
7	1199	68.2	877	2	I48967	brain-specific kin
8	1196	68.0	991	2	I78843	receptor protein-t
9	1191	67.7	898	2	S47489	receptor tyrosine
10	1184	67.3	893	2	S51603	receptor-like tyro
11	1184	67.3	981	2	S51604	receptor-like tyro
12	1184	67.3	1005	2	S49015	receptor tyrosine
13	1156.5	65.7	849	2	I50617	protein-tyrosine k
14	1153.5	65.6	986	2	S78059	protein-tyrosine k
15	1152.5	65.5	985	2	I51549	receptor tyrosine
16	1152.5	65.5	986	2	I78844	receptor protein-t
17	1151.5	65.5	983	2	B45583	receptor tyrosine
18	1151	65.4	998	2	I58351	receptor protein-t
19	1149.5	65.3	983	2	A38224	protein-tyrosine k
20	1143	65.0	998	2	JC5672	receptor tyrosine

21	1121.5	63.8	983	2	A45583	receptor tyrosine
22	1115.5	63.4	984	2	A39753	protein-tyrosine k
23	1112.5	63.2	952	2	I50612	protein-tyrosine k
24	1107.5	63.0	480	2	I48760	protein-tyrosine k
25	1106.5	62.9	995	2	A56599	embryo kinase 5 -
26	1105.5	62.8	970	2	I78842	receptor protein-t
27	1104.5	62.8	478	2	A57174	protein-tyrosine k
28	1091.5	62.1	948	2	S51605	receptor-like tyro
29	1091.5	62.1	998	2	S37627	protein-tyrosine k
30	1089	61.9	985	2	I51672	receptor tyrosine
31	1088.5	61.9	988	2	I50611	protein-tyrosine k
32	1087.5	61.8	993	2	I48653	mouse developmenta
33	1053.5	59.9	938	2	I49071	protein kinase - m
34	1047	59.5	612	2	S33506	protein-tyrosine k
35	1044.5	59.4	987	2	A54092	protein-tyrosine k
36	1041.5	59.2	987	2	I48953	eph-related recept
37	1035.5	58.9	987	2	I48652	mouse developmenta
38	994.5	56.5	372	2	S23363	protein-tyrosine k
39	974	55.4	1019	2	T13039	tyrosine kinase re
40	942.5	53.6	984	1	A34076	protein-tyrosine k
41	811.5	46.1	919	2	T29581	hypothetical prote
42	799	45.4	1122	2	T42400	Eph receptor tyros
43	772.5	43.9	1006	2	JC5526	kinase-defective E
44	724	41.2	275	2	I48761	protein-tyrosine k
45	633.5	36.0	334	2	T43450	hypothetical prote

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OM protein - protein search, using sw model

Run on: March 21, 2006, 22:37:09 ; Search time 74.2827 Seconds  
 (without alignments)  
 3162.796 Million cell updates/sec

Title: US-10-601-324-3  
 Perfect score: 1759  
 Sequence: 1 MSYYHHHHHDYDIPTTENL.....LKTLADFDPRVSIRLPSTSG 333

Scoring table: BLOSUM62  
 Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : UniProt\_05.80:\*  
 1: uniprot\_sprot:\*  
 2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	1590.5	90.4	976	1	EPHA2_HUMAN
2	1590.5	90.4	976	2	Q8N3Z2_HUMAN
3	1544	87.8	977	1	EPHA2_MOUSE
4	1424.5	81.0	974	2	Q6DII4_XENTR
5	1412.5	80.3	963	2	Q5FWW9_XENLA
6	1407.5	80.0	976	2	Q6NTV5_XENLA
7	1355	77.0	977	2	Q9PWR5_XENLA
8	1309.5	74.4	712	2	Q4SC90_TETNG
9	1278.5	72.7	1042	2	Q4RXA0_TETNG
10	1246.5	70.9	666	2	O73876_BRARE
11	1246.5	70.9	984	2	Q6NZS1_BRARE
12	1201	68.3	1013	1	EPHA5_CHICK
13	1199	68.2	877	1	EPHA5_MOUSE
14	1196	68.0	369	2	Q95K57_MACFA
15	1196	68.0	819	2	Q6PFV6_MOUSE
16	1196	68.0	1017	2	Q59FT4_HUMAN
17	1196	68.0	1037	1	EPHA5_HUMAN
18	1188	67.5	969	2	Q7Z3F2_HUMAN
19	1184	67.3	1005	1	EPHA5_RAT
20	1156.5	65.7	986	1	EPHA4_CHICK
21	1153.5	65.6	927	2	Q99KA8_MOUSE
22	1153.5	65.6	986	1	EPHA4_MOUSE



23	1153.5	65.6	986	2	Q80VZ2_MOUSE	Q80vz2	mus musculu
24	1152.5	65.5	711	2	Q53TA0_HUMAN	Q53ta0	homo sapien
25	1152.5	65.5	949	2	Q58F15_HUMAN	Q58f15	homo sapien
26	1152.5	65.5	985	1	EPA4B_XENLA	Q91694	xenopus lae
27	1152.5	65.5	986	1	EPHA4_HUMAN	P54764	homo sapien
28	1152.5	65.5	986	2	Q7ZYM7_XENLA	Q7zym7	xenopus lae
29	1152	65.5	986	1	EPA4A_XENLA	Q91845	xenopus lae
30	1151.5	65.5	664	2	Q4RYX7_TETNG	Q4ryx7	tetraodon n
31	1151.5	65.5	983	1	EPHA3_CHICK	P29318	gallus gall
32	1151.5	65.5	986	2	Q5ZEW1_BRARE	Q5zew1	brachydanio
33	1151	65.4	993	1	EPHA7_CHICK	O42422	gallus gall
34	1151	65.4	998	1	EPHA7_HUMAN	Q15375	homo sapien
35	1150	65.4	998	1	EPHA7_RAT	P54759	rattus norv
36	1149.5	65.3	983	1	EPHA3_HUMAN	P29320	homo sapien
37	1149.5	65.3	984	2	Q8BRB1_MOUSE	Q8brb1	mus musculu
38	1149.5	65.3	984	2	Q8C3U1_MOUSE	Q8c3u1	mus musculu
39	1147	65.2	998	2	Q8BSU8_MOUSE	Q8bsu8	mus musculu
40	1145.5	65.1	983	2	Q6P4R6_HUMAN	Q6p4r6	homo sapien
41	1143	65.0	998	1	EPHA7_MOUSE	Q61772	mus musculu
42	1142.5	65.0	963	2	Q4RQW0_TETNG	Q4rqw0	tetraodon n
43	1142.5	65.0	984	1	EPHA3_RAT	O08680	rattus norv
44	1142	64.9	994	2	Q8R381_MOUSE	Q8r381	mus musculu
45	1139	64.8	976	2	Q90ZN9_BRARE	Q90zn9	brachydanio